

Federal Aviation Administration
Aviation Rulemaking Advisory Committee

Air Carrier Operations Issue Area
Flight Crewmember Flight/Duty/Rest Requirements Working Group
Task 1 – Regulations and Industry Compliance/Practices

Task Assignment

FILE COPY

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Aviation Rulemaking Advisory Committee; Air Carrier Operations Subcommittee;
Flight Crewmember Flight/Duty/Rest Requirements Working Group

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of establishment of Flight Crewmember Flight/Duty/Rest
Requirements Working Group.

SUMMARY: Notice is given of the establishment of a Flight Crewmember
Flight/Duty/Rest Requirements Working Group by the Air Carrier Operations
Subcommittee of the Aviation Rulemaking Advisory Committee. This notice
informs the public of the activities of the Air Carrier Operations
Subcommittee of the Aviation Rulemaking Advisory Committee.

FOR FURTHER INFORMATION CONTACT: Mr. William W. Edmunds, Jr., Air Line Pilots
Association International, P.O. Box 1169, Herndon, VA 22070; telephone
(703) 689-2270; fax number (703) 689-4370.

SUPPLEMENTARY INFORMATION: The Federal Aviation Administration (FAA)
established an Aviation Rulemaking Advisory Committee (56 FR 2190, January 22,
1991) which held its first meeting on May 23, 1991 (56 FR 20492, May 3, 1991).
The Air Carrier Operations Subcommittee was established at that meeting to
provide advice and recommendations to the Director, FAA Flight Standards
Service, on air carrier operations, pertinent regulations, and associated
advisory material. At its May 12, 1992, meeting, the subcommittee established
the Flight Crewmember Flight/Duty/Rest Requirements Working Group.

Specifically, the working group's task is the following:

To determine whether regulations pertaining to air carrier flight crewmember, flight, duty, and rest requirements are consistently interpreted and understood by the FAA, air carriers, and pilots. Evaluate industry compliance/practices regarding scheduling of duty, reserve, and rest periods and reports of excessive pilot fatigue as a result of such scheduling. If appropriate, develop recommendations for advisory material and/or a regulatory revision.

The Flight Crewmember Flight/Duty/Rest Requirements Working Group will be comprised of experts from those organizations having an interest in the task assigned to it. A working group member need not necessarily be a representative of one of the organizations of the parent Air Carrier Operations Subcommittee or of the full Aviation Rulemaking Advisory Committee. An individual who has expertise in the subject matter and wishes to become a member of the working group should write the person listed under the caption "FOR FURTHER INFORMATION CONTACT" expressing that desire and describing his or her interest in the task and the expertise he or she would bring to the working group. The request will be reviewed with the subcommittee chair and working group leader, and the individual advised whether or not the request can be accommodated.

The Secretary of Transportation has determined that the formation and use of the Aviation Rulemaking Advisory Committee and its subcommittees are necessary in the public interest in connection with the performance of duties imposed on the FAA by law. Meetings of the full committee and any subcommittees will be open to the public except as authorized by section 10(d)

of the Federal Advisory Committee Act. Meetings of the Flight Crewmember Flight/Duty/Rest Requirements Working Group will be not be open to the public, except to the extent that individuals with an interest and expertise are selected to participate. No public announcement of working group meetings will be made.

Issued in Washington, DC, on June 9, 1992



David S. Potter
Executive Director
Air Carrier Operations Subcommittee
Aviation Rulemaking Advisory Committee

Recommendation Letter



AIR LINE PILOTS ASSOCIATION

535 HERNDON PARKWAY □ P.O. BOX 1169 □ HERNDON, VIRGINIA 22070 □ (703) 689-2270

July 1, 1994

Mr. Anthony J. Broderick
Associate Administrator for
Regulation and Certification
Federal Aviation Administration
800 Independence Avenue, S.W.
Washington, D.C. 20591

Subject: Report of Flight Crewmember Flight/Duty/Rest Requirements Working Group

Dear Mr. Broderick:

The Aviation Rulemaking Advisory Committee met on June 30, 1994 to discuss Air Carrier Operations. At that meeting, we received the report of the Flight Crewmember Flight/Duty/Rest Requirements Working Group which we are forwarding to you.

Donald Hudson, M.D., working group chairman, did an excellent job of keeping the group on track but the issues were too contentious to allow resolution with a clear consensus position. As Dr. Hudson notes in his report, the working group did agree that the most important problems are continuous/indefinite duty, reserve scheduling, back-side-of-the-clock scheduling, and scheduled reduced rest.

The proposals contained in the working group report address these problems from the different perspectives of the participants. In some instances, the positions are fairly close. Dr. Hudson notes that he believes there is enough scientific evidence to allow the FAA to provide a safe operating regulation and address the issues without unfair economic penalty to air carriers. He does not believe there is any physiological justification for having different work rules for Part 121 and Part 135 operations.

The working group stands ready to assist you in whatever manner may be appropriate as the FAA develops a regulation for flight time limitations and rest requirements.

Thank you for this opportunity to address these issues.

Sincerely,

William W. Edmunds, Jr., Assistant Chairman
Aviation Rulemaking Advisory Committee

WWE:jch

Acknowledgement Letter



U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

AUG 8 1994

Mr. William W. Edmunds, Jr.
Assistant Chairman, Aviation Rulemaking
Advisory Committee
Airline Pilots Association
Herndon, Virginia 22070

Dear Mr. Edmunds:

Thank you for your July 1 letter forwarding the Aviation Rulemaking Advisory Committee (ARAC) proposals concerning flight crewmember flight/duty/rest requirements.

The proposals submitted will be used as a source of reference for the Federal Aviation Administration (FAA) to develop rulemaking on the subject. These documents are valuable to us because they provide the different perspectives of the various interest groups and, as you note, identify some areas where agreement is close.

I would like to thank the aviation community for its commitment to ARAC and its expenditure of resources to develop the proposals. We in the FAA pledge to use the proposals to the maximum extent possible.

Again, let me thank the ARAC and, in particular, the Flight/Duty/Rest Requirements Working Group for its prompt action on the task that the FAA imposed.

Sincerely,

Anthony J. Broderick
Associate Administrator for
Regulation and Certification

Recommendation

All Flight Crewmembers

Flight Crewmember Flight Time, Duty Period Limitations, Off Duty Requirements, and Reserve Scheduling Restrictions.

(Formerly FAR Part 135, scheduled and unscheduled, and FAR Part 121)

- (a) No air carrier may schedule any flight crewmember and no flight crewmember may accept an assignment for flight time under any part of the Federal Air Regulations on behalf of any certificate holder, if that crewmember's total flight time on behalf of any certificate holder will exceed:
 - (1) 1,000 hours in any calendar year;
 - (2) 100 hours in any calendar month;
 - (3) 30 hours in any 7 consecutive days;
 - (4) 8 hours between required off duty periods.
- (b) A flight crewmember is not considered to be scheduled for flight time in excess of flight time limitations, if the flights to which he is assigned are scheduled and normally terminate within the limitations but due to circumstances beyond the control of the air carrier (such as adverse weather conditions), are not at the time of departure expected to reach their destination within the scheduled time. This paragraph does not allow the extension of any duty period.
- (c) No air carrier may schedule any flight crewmember and no flight crewmember may accept an assignment for duty:
 - 1) For more than 14 hours if the duty time is contained totally within the consecutive time period 0500-0259, inclusive, based upon the crewmember's domicile time.

In all other cases the maximum duty time will be 12 hours.

 - 2) The maximum duty period shall be reduced by 30 minutes for each flight segment in excess of 8 segments in a duty period.
- (d) No air carrier may assign a flight crewmember and no flight crewmember may accept an assignment for duty:
 - 1) without an off duty period, immediately preceding the duty period, of at least 10 consecutive hours if the duty time is contained totally within the consecutive time period 0500-0259, inclusive, based upon the crewmember's domicile time. In all

other cases the minimum off duty time preceding a duty period will be 12 consecutive hours.

- 2) The off duty periods required under subparagraph 1, above, may be reduced in actual operations due to circumstances beyond the control of the carrier by one hour. If the off duty period is so reduced, the minimum subsequent off duty period must be increased by one hour, and the maximum length of the subsequent duty period must also be reduced by one hour.
 - 3) An off duty period of between 18 and 30 hours shall require the sum of the abutting duty periods to total 20 hours or less.
- (e) Each air carrier shall relieve each flight crewmember from all duty for at least 24 consecutive hours during any 7 consecutive calendar days.
 - (f) No air carrier may assign any flight crewmember and no flight crewmember may accept assignment to any duty with the air carrier during any required off duty period.
 - (g) Time spent in transportation, not local in character, that an air carrier requires of a flight crewmember is considered part of the duty period.
 - (h) Reserve: To provide an adequate, predictable and protected off duty period to a flight crewmember on reserve status, flight crewmember reserve status shall be subject to the following:
 - (1) A "standby reserve" is a flight crewmember who is required:
 - (a) to be at a location specified by the air carrier; or
 - (b) to report to a location specified by the air carrier in less than 2 hours notice.Time spent subject to (a) and/or (b), above, is considered time on duty.
 - (2) An "on-call reserve" is a flight crewmember who is required to report to a location specified by the air carrier on notice of 2 hours or more.
 - (3) The total sum of (a) on call reserve time and, (b) duty time shall not exceed 16 hours if the duty time is contained within 0500 to 0259 domicile time, inclusive; and 14 hours in all other cases.

For purposes of calculating on call reserve time, the time period 0001 through 1000, domicile time, shall be excluded, providing the flight crewmember is not contacted by, or required to contact, the air carrier during such period. An operator complying with this paragraph need not comply with paragraph 4, below.

- (4) An operator complying with paragraph (3) may also choose one of these options. If one of the following conditions is satisfied, an on-call reserve shall be considered off duty until report at a location specified by the air carrier:
 - (a) The air carrier shall provide each on-call reserve at least 8 consecutive hours off duty time in any 24 consecutive hours. The off duty period may not shift more than 3 hours domicile time earlier or later than the preceding off duty period, nor may it shift more than 8 hours in any 7 consecutive days. At a minimum, the air carrier must inform the flight crewmember at the beginning of each 24 hour period on reserve as to when the 8 consecutive hour off duty period will occur.
 - (b) A minimum of 10 hours of advance notice of assignment, and the flight crewmember is released to off duty. Only one 10 hour advance notice of assignment time can be given in any 24 hour reserve period.
 - (c) Scheduled flight time to which the reserve is assigned is contained totally within 0600-0000 domicile time (inclusive). If an air carrier complies with this paragraph, it may assign a flight crewmember to flight time which is scheduled to occur during the period of 0600-0000 hours, domicile time, subject to the flight time limitations and off duty requirements of this section.
- (5) Certificate holders must prospectively assign flight crewmembers to a specific (standby or on call reserve) assignment and once so assigned, may not switch the type of reserve assigned without an intervening off duty period.

DEFINITIONS

For Inclusion In FAR Part 1

Duty period: that period of time during which a crewmember performs any function assigned by the certificate holder. This includes, but is not limited to, preflight duties, postflight duties, flight duties, training, office work, and Standby reserve.

Off Duty Period: a time period free of all restraint for duty for a certificate holder and free of all responsibility for work or duty should the occasion arise. An off duty period must be assigned prospectively.

Flight segment: a single flight consisting of one takeoff and one landing.

PROPOSAL TO THE

AVIATION RULEMAKING ADVISORY
COMMITTEE

AND

FEDERAL AVIATION ADMINISTRATION

FAR PART 135.263 AND 135.267
UNSCHEDULED OPERATIONS

By consent of the Labor/Pilot members of the Flight/Duty/Rest Requirements Working Group.

**PROPOSED PREAMBLE TO CHANGES OF FAR'S
135.263, AND 135.267**

SUMMARY: This final rule amends flight time limitations and rest requirements for flight crewmembers engaged in unscheduled air transportation. The rule is based on recommendations of the Aviation Rulemaking Advisory Committee's Flight/Duty/Rest Requirements Working Group composed of persons who represent the interests affected by the flight time rules. The rule clarifies certain requirements that have had voluminous interpretations and changes wording within the existing rules to comply with the original intent of the rule-making that occurred on October 1, 1985.

SUPPLEMENTARY INFORMATION:

Background

On June 15, 1992 the Federal Aviation Administration announced the establishment of a Flight Crewmember Flight/Duty/Rest Requirements Working Group in Volume 57, Number 115, page 26685 of the Federal Register. The Working Groups task was: "To determine whether regulations pertaining to air carrier flight crewmember, flight, duty, and rest requirements are consistently interpreted and understood by the FAA, air carriers, and pilots. Evaluate industry compliance/practice regarding scheduling of duty, reserve, and rest periods and reports of excessive pilot fatigue as a result of such scheduling. If appropriate, develop recommendations for advisory material and/or a regulatory revision."

Through many meetings of the working group in 1992 and 1993, it was quickly determined that flight, duty, and rest requirements were misunderstood by the industry and various offices within the FAA. The group did find that the interpretations issued by the Chief Counsel's office of the FAA were consistent in regards to the areas of concern, but in one case, not consistent with the intent of the 1985 changes to certain rules.

The working group determined that the only way to correct the misunderstandings of the current rule, and to correct the interpretations issued by the FAA Chief Counsel, was to make a regulatory revision.

Intent of the Rule

The Working Group quickly identified two areas of misunderstanding and misinterpretation. Therefore, the group focused on the following objectives:

1. To correct the language in the current rule that allows a "never-ending" duty period.

2. To clarify existing regulations pertaining to rest requirements as they apply to flight crewmembers performing a standby or reserve function with a present responsibility for work, if called, by the certificate holder.

Comments on the Proposed Rule

RESERVED FOR FAA

The Rule

135.263(b) was changed to allow the exclusions found in the proposed 135.267(h). It was not changed in a manner that would cause a change to any existing 135.265(Scheduled) rule.

135.263(d) was changed only to eliminate gender specific terminology.

135.267(a) was changed to provide flight time limitations that are more in line with current fatigue science and to be more in line with the flight time limits of Part 121 and 135.265.

135.267(b) was changed so as to include any type of assigned flights to the daily flight time limitations found in this paragraph.

135.267(c)(4) was added to provide for unforeseen in-flight delays that might otherwise cause a violation of present regulations.

135.267(d) was changed to eliminate the "never-ending" possible duty period by changing the word planned to the word actual.

135.267(d)(1) was added to provide for unforeseen in-flight delays that might otherwise cause a violation of the changed regulations.

135.267(f) was changed to provide two options for certificate holders to use in providing rest periods designed to combat cumulative fatigue.

135.267(g), (h), and (i) was removed and replaced with specific language addressing crewmembers performing a reserve or standby duty at the direction of a certificate holder.

Section by Section Discussion

Under the existing 135.263(b), no form of duty, including reserve or standby in which a crewmember has a present responsibility for work, if called could be performed during any required rest period. It is the intent of the change in this rule to allow very

limited exceptions to this rule, specifically as to it's applicability to reserve and standby crewmembers. Without this exception, the Chief Counsel interpretations of rest and duty as applied to standby and reserve would continue to be correct in there most limiting application.

The change to 135.263(d) was made solely to correct the gender specific word "he" to the wording "he/she".

135.267(a) was changed in two ways. First, the language of paragraph a was changed to include any other flight time directed by the certificate holder to count towards the cumulative total of 135.267(a)(1) and (2). This would include Part 91 flights assigned by the certificate holder. This change is a recommendation of the NTSB as well .

135.267(b) was changed to insure that all flying done on behalf of a certificate holder is included in the daily flight time limits. As in paragraph (a), this change insures that excessive flight times are not possible by a certificate holder assigning "tail end ferrys" to an already long day. A recent report by the NTSB of an accident recommends to the FAA as a Class II Priority action, that this change be made.

135.267(c)(4) was added because under the specific regulation found in 135.267(c) a duty period could not be any longer than 14 hours under any circumstance. Although 135.267(c) was drafted so as to provide certain types of certificate holders to operate in a manner inconsistent with flight time limitations found in 135.267(b), it failed to allow for any deviation from the regulation's "duty period of no more than 14 hours." In much of the discussion during working group meetings, air carriers as well as flight crewmembers found that under the strictest interpretations, a crewmember who experienced an unforeseen in-flight delay (unforecast weather, destination airport closure, diversion due to mechanical malfunctions, etc.) would either have to land the aircraft at an unscheduled location or violate the regulations provision of "no more than 14 hours." By adding 135.267(c)(4), a crewmember who is delayed during a flight that would normally terminate within the limitations of the rule could continue the flight to destination or alternate in the event of an unforeseen in-flight delay that would cause the crewmember to exceed the 14 hour duty limit. However, it is the intent of this rule that it can only be applied to an actual in-flight delay and only to the flight segment that the delay occurred. Any delays to earlier flights scheduled by the carrier cannot be used to continue further scheduled flights beyond the 14 hour limit. Additionally, any flight that departs close to the 14 hour limit must reasonably be expected to terminate within the 14 hour limit in order to use the exclusionary language found in 135.267(c)(4).

Additionally it was found that there may be some misunderstanding of the concept of 135.267(c) and its applicability to operations

under the unscheduled rules of Part 135. 135.267(c) was created during the 1985 Regulation by Negotiation meetings and was given the approval of the FAA as a very limiting regulation. The purpose of 135.267(c) was to give operators who "regularly

assigned" their crewmembers to the same duty and rest periods day after day a method in which they could have flight time in excess of the 8 or 10 hours required by paragraph (b). The key to this regulation is found in the term "regularly assigned duty period". It was the intent of the negotiators and the FAA that regularly assigned duty period would mean that a crewmember begins and ends his duty period at the same time each day. This also creates a rest period that begins and ends each day at the same time. This would create a circadian rhythm that would tend to allow deviations of the flight time limitations found in paragraph (b) without compromising safety of flight. Further, the FAA has held that a crewmember must be assigned these "regularly assigned duty periods" for at least 4 consecutive weeks in order to be able to use the limitations found in 135.267(c). A certificate holder that assigns duty periods daily, or that assigns crewmembers to duty periods that constantly change their start times, or assign crewmembers rest periods that begin at different times each day or are of varying lengths, can not use the provisions of 135.267(c). Therefore, it would be very difficult for on-demand unscheduled operators to comply with paragraph (c), and would be required to comply with the provisions found in 135.267(b).

135.267(d) was drafted in 1985 so as to create an implied duty limit of 14 hours as was shown under 135.267(c). Unlike 135.263(d) which provides for extensions to flight time limitations due to circumstances beyond the control of the certificate holder, no such exclusionary language was specifically drafted to allow extension of the implied 14 hour duty limit. Some of the working group members were on the 1985 Advisory Committee that drafted the current regulation, and it was stated that it was the committee's intent to create a 14 hour maximum duty by virtue of the "look-back" provisions of rest requirements found in this rule. Unfortunately, this intent was over-ruled by the FAA's Chief Counsel in many interpretations issued over the last 8 years. The Chief Counsel found that the 10 hour rest period found in the 24 hour "look-back" was based on the "planned" completion time of an assignment. Through many discussions during working group meetings, this interpretation was found to create absurd duty lengths. Many occurrences of 18 or more hour duty periods were related by flight crewmembers because of this interpretation. Under the interpretation, a flight delayed 7 hours because of mechanical malfunctions could nevertheless be performed even if it would cause a crewmember to have 21 or more hours of continuous duty. Further, under the Chief Counsel's interpretations, even if the delay was on the first leg of a series of flights, all of the "scheduled" flights could be completed. Additionally, late arriving passengers was ruled to be beyond the control of the certificate holder and

would not be cause to discontinue a flight due to rest requirements. In all of the Chief Counsel's interpretations of this rule, the key language of the existing rule was the planned completion time of the assignment. The change made in this rule was simply to change the word planned for the word actual. This

would create the conditions originally intended in 1985 by making the 14 hour implied duty limit a maximum. This would further cause certificate holders to schedule end of day flights realistically and to provide a protective buffer to the 14 hour duty window. The working group clearly indicated that the open-ended duty period created by the mis-wording of this rule was contrary to flight safety. Also NASA fatigue research scientists on the working group stated that the conditions in which unscheduled flight crewmembers work (circadian disruption, inconsistent sleep and work patterns, etc.), clearly called for a maximum duty period between rest periods. Additionally, this paragraph's reference to 135.267(b) requires that all assigned flights, including those under FAR Part 91 that are directed by the certificate holder be completed within the lookback provisions of this paragraph.

135.267(d)(1) was added to give the same in-flight protection as discussed in the addition of 135.267(c)(4).

135.267(f) was changed because the current rule allowing for 13 days off in any quarter was often abused by certificate holders. The rule allowed for the very real ability of the certificate holder to use a flight crewmember for up to 77 consecutive days, 14 hours each day, with only 10 hours rest. This concept is simply not in accordance with any rational thought on sleep disorders and fatigue research. And, when applying this rule to the "no schedule" concept of on-demand operations, could not stand up to scientific analysis, much less, common sense. The proposed rule allows the certificate holder to provide either 24 consecutive hours off in any 7 days or they must provide 72 consecutive hours off in any 14 days. This gives the unscheduled operator the flexibility to use a flight crewmember for up to 11 consecutive days with three days off, or by providing one day off during every 7 days. This is also in concert with the "one level of safety" concept that was discussed during working group meetings and by Mr. Broderick.

135.267(g) was created to clarify the rest requirements of crewmembers who are directed by the certificate holder to be in a status of readiness to perform flight duty and to remain contactable for such an assignment. The FAA's Chief Counsels have issued interpretations for over 40 years indicating that the FAA considered either actual work for an air carrier or a present responsibility for work, should it arise, to be a duty that cannot be counted towards the rest requirements of the regulations. Further, they have indicated that any required rest period must be prospectively assigned and be free of any

restraint by the certificate holder. In the 1985 changes to the regulations, the FAA made minor changes to the wording of the new rules to insure that the word duty could not be confused for flight time as in the Ozark Airlines case in 1974. These changes further indicated the FAA's belief that any form of duty could not be considered rest. Throughout many hours of discussion, working group members related scenarios which now occur in which flight crewmembers are operating aircraft after being without sleep for 20 or more hours. This happens because of a lack of understanding of the rest requirement rules as they apply to reserve or standby crewmembers. Additionally, FAA field personnel were also found to be lacking in the understanding of these requirements, and as such, a limited, at best, enforcement of FAA requirements was found. In order to eliminate the possibility of flight crewmembers operating aircraft without adequate prospective rest, standby or reserve duty was interpreted to be inconsistent with proper rest requirements. Once again, NASA fatigue research scientists found that a "predictable and protected" rest period was necessary each day if a crewmember was to be adequately rested for flight duty. They found that a prospective rest requirement was even more necessary for flight crewmembers operating in the unscheduled environment with the associated circadian disruptions.

135.267(g) defines a crewmember who has been assigned to a standby reserve function at a location specified by the certificate holder (hotel, flight office, etc.), or who has an assigned responsibility to report to work for the air carrier within 2 hours of notification. Any time spent in this form of reserve would not be considered rest, and any subsequent flight assignment could not use any portion of this reserve to meet the rest requirements found in 135.267(d). Once a crewmember has had 14 hours of standby reserve, that crewmember may not accept an assignment for flight without an intervening rest period of no less than 10 consecutive hours.

135.267(h) was created to address a slightly less restrictive form of reserve titled "on-call reserve". An on-call reserve crewmember is assigned by the certificate holder to remain contactable off airport (hotel, motel, home, or by telephonic device) and who is required to report for work with the certificate holder in more than two hours from initial contact. A crewmember required to be at an airport cannot be considered an on-call reserve.

135.267(h)(1) creates a slightly longer duty period available for a crewmember who performs on-call reserve. Once a crewmember is assigned on-call reserve, he may be called at any time during the first 14 hours of such reserve duty and assigned a flight or other duty. The 18 hour limitation found in this paragraph is intended to allow a flight crewmember to be used in actual duty for up to 18 hours from the beginning of the reserve assignment,

however, if the crewmember is called to duty at the very beginning of an on-call reserve assignment, he may not perform an actual duty period of more than 14 hours. An example of this would be when a crewmember is called at the very first moment of on-call reserve. The crewmember would then report to the location specified by the certificate holder no sooner than two hours later. He then could only be on duty for 14 more hours. This would total sixteen hours from initial contact and remain in the 18 hour limits of this paragraph. If a crewmember was called later in the on-call reserve assignment, he may report to the location specified by the certificate holder and then perform any other duty for up to 18 hours of combined reserve plus assigned duty, as long as the assigned duty does not exceed 14 hours.

135.267(h)(2) means that if a crewmember is performing on-call reserve and has not been called by the 14th hour of such reserve, the crewmember must then be given a 10 or more hour rest period before accepting a duty assignment or additional reserve assignment. If a flight crewmember is not called by hour 14 of the on-call reserve, he could not report to the specified location any sooner than the 16th hour and would then only be useable for a maximum of 2 hours. This would rarely be useful to a certificate holder, considering pre-flight and postflight duties would further reduce the flight availability. This would however, insure that a normal sleep cycle and circadian rhythm is maintained if the crewmember is not called to duty.

135.267(i) A flight crewmember must be prospectively (in advance of the reserve assignment commencing) assigned either "On-Call" or "Standby" reserve, and once either form of reserve commences, may not be switched to the other form of reserve (i.e. On-Call to Standby or Standby to On-Call) without an intervening rest period of at least 10 consecutive hours. This precludes a certificate holder using a crewmember for 4 hours of 2 hour call out and then switching the crewmember to immediate call out for the last 14 hours.

SUBPART F - FLIGHT CREWMEMBER FLIGHT TIME, DUTY PERIOD
LIMITATIONS, AND REST REQUIREMENTS

135.261 APPLICABILITY

Sections 135.263 through 135.271 prescribe flight time, duty period limitations, and rest requirements for operations conducted under this subpart.

- (a) 135.263 applies to all operations under this subpart.
- (b) 135.265 applies to:
 - (1) Scheduled passenger-carrying operations except those conducted solely within the State of Alaska. "Scheduled passenger-carrying operations" means passenger-carrying operations that are conducted in accordance with a published schedule which covers at least five round trips per week on at least one route between two or more points, includes dates or times (or both), and is openly advertised or otherwise made available to the general public, and
 - (2) Any other operation under this part, if the operator elects to comply with 135.265 and obtains an appropriate operations specification amendment.
- (c) Section 135.267 and 135.269 apply to any operation that is not a scheduled passenger-carrying operation and to any operation conducted solely within the State of Alaska, unless the operator elects to comply with 135.265 as authorized under paragraph (b)(2) of this section.
- (d) Section 135.271 contains special daily flight time limits for operations conducted under the helicopter emergency medical evacuation service (HEMES).

135.263 FLIGHT TIME AND REST REQUIREMENTS: ALL CERTIFICATE HOLDERS

- (a) A certificate holder may assign a flight crewmember and a flight crewmember may accept an assignment for flight time only when the applicable requirements of Parts 135.263 through 135.271 are met.
- (b) Except as provided in 135.267(h), no certificate holder may assign any flight crewmember to any duty with the certificate holder during any required rest period.
- (c) Time spent in transportation, not local in character, that a certificate holder requires of a flight crewmember and provides to transport the crewmember to an airport at which he or she is to serve on a flight as a crewmember, or from an airport at which he or she was from duty to return to his or her home station, is not considered part of a rest period.
- (d) A flight crewmember is not considered to be assigned to flight time in excess of the flight time limitations if the flight segment to which he or she is assigned normally terminate within the limitations, but due to circumstances beyond the control of the certificate holder or flight crewmember (such as adverse weather conditions), are not at the time of departure expected to reach their destination within the planned flight time.

135.267 FLIGHT TIME, DUTY PERIOD LIMITATIONS AND REST REQUIREMENTS:
UNSCHEDULED ONE- AND TWO-PILOT CREWS

- (a) No certificate holder may assign any flight crewmember, and no flight crewmember may accept an assignment for flight time under any part of the Federal Air Regulations on behalf of any certificate holder, if that crewmembers total flight time, when added to any other commercial flying will exceed:
 - (1) 1200 hours in any calendar year.
 - (2) 120 hours in any calendar month.
- (b) Except as provided in paragraph (c) of this section, during any 24 consecutive hours the total flight time of any assigned flights when added to any other commercial flying by that flight crewmember may not exceed-
 - (1) 8 hours for a flight crew consisting of one pilot; or
 - (2) 10 hours for a flight crew consisting of two pilots.
- (c) A flight crewmember's flight time may exceed the flight time limits of paragraph (b) of this section if the assigned flight time occurs during a regularly assigned duty period of no more than 14 hours and-
 - (1) If this duty period is immediately preceded by and followed by a required rest period of at least 10 consecutive hours of rest;
 - (2) If flight time is assigned during this period, that total flight time when added to any other commercial flying by the flight crewmember may not exceed-
 - (i) 8 hours for a flight crew consisting of one pilot; or
 - (ii) 10 hours for a flight crew consisting of two pilots; and
 - (3) If the combined duty and rest periods equal 24 hours.
 - (4) It shall not be a violation of paragraph (c) if at the actual time of departure, the flight was expected to, and normally would, terminate within the limitations of paragraph (c), but due to an unforeseen in-flight delay, could not be completed within the requirements of paragraph (c).
- (d) Except as provided in (d)(1), each assignment under paragraph (b) of this section must provide for at least 10 consecutive hours of rest during the 24 hour period that precedes the actual completion time of the assignment.
 - (1) It shall not be a violation of paragraph (d) if at the actual time of departure, the flight was expected to and normally would, terminated within the limitations of paragraph (d), but due to an unforeseen in-flight delay, could not be completed within the requirements of paragraph (d).
- (e) When a flight crewmember has exceeded the daily flight time limitations in this section, because of circumstances beyond the control of the certificate holder or the flight crewmember (such as adverse weather conditions), that flight crewmember must have a rest period before assigned or accepting an assignment for flight time of

at least-

- (1) 11 consecutive hours of rest if the flight time limitation is exceeded by not more than 30 minutes;
- (2) 12 consecutive hours of rest if the flight time limitation is exceeded by more than 30 minutes, but not more than 60 minutes, and
- (3) 16 consecutive hours of rest if the flight time limitation is exceeded by more than 60 minutes.

(f) Each certificate holder shall relieve each flight crewmember from all duty for at least:

- (1) 24 consecutive hours during any 7 consecutive calendar days, or;
- (2) 72 consecutive hours during any 14 consecutive calendar days

(g) A "Standby Reserve" is a flight crewmember who is required:

- (1) To be at a location specified by the certificate holder: or,
- (2) To report to a location specified by the certificate holder in less than 2 (two) hours from time of contact by the certificate holder.

Time spent subject to (1) and/or (2), above, is considered on duty.

(h) An "On-Call Reserve" is a flight crewmember who is required to report to a location specified by the certificate holder in more than 2 (two) hours from initial contact; and,

- (1) The total sum of On-Call reserve when added to any other duty shall not exceed 18 hours, or 14 hours of actual duty, whichever occurs first; and,
- (2) A flight crewmember who has performed On-Call reserve for 14 hours without being called for any other duty shall be given a rest period of no less than 10 consecutive hours before being assigned to any other duty or reserve.

(i) Certificate holders must prospectively assign flight crewmembers to a specific reserve assignment (Standby or On-Call), and once so assigned, may not switch the type of reserve assigned without an intervening rest period of at least 10 consecutive hours.

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AMAS

January 3, 1994

Dr. Don Hudson
Chairman, ARAC Flight/Duty Rest Requirements Working Group
12000 East 47th Avenue
Suite 117
Denver, Colorado 80239

Dear Dr. Hudson,

Enclosed is the proposal for revision to the FAR Part 135 unscheduled flight/duty time regulations, submitted jointly by **NATA** (The National Air Transportation), **HAI** (Helicopter Association International) and **NBAA** (National Business Aircraft Association).

This proposal represents the views of the membership of the above organizations representing **over 2000 FAR Part 135 Air Carrier Certificate Holders**. This proposal has been developed to provide a balance between the needs of the Certificate Holders as well as the Flight Crewmembers regarding crew scheduling in an unscheduled, on demand environment, without substantially changing the existing rules.

There is no doubt that safety must always be the prominent consideration in these discussions however, any regulatory changes should not inflate operational costs.

Our proposal clearly defines what is **Duty, Rest**, and the new concepts of **Standby Reserve** and **Reserve**. In so doing this proposal is eliminating confusion for management and labor and reduces additional FAA regulatory interpretations concerning Duty and Rest.

This proposal is designed to clearly place the responsibilities for crew flight and duty time on both the Certificate Holders and the Flight Crewmembers to assure operations in full compliance with the FARs.

I have been working with Mr. Tom Gasta since the December 8th committee meeting to try and achieve an agreement on this document, unfortunately we could not do it and before Christmas Mr. Gasta decided to provide a "labor" document for consideration.

As a result, I would appreciate it if you could present this document to the full ARAC committee as the unscheduled FAR Part 135 Certificate Holder's position regarding this subject.

Sincerely,



Gregory L. Wilcox

**PROPOSED FLIGHT/DUTY TIME/REST AND RESERVE RULE REVISIONS
FOR FAR PART 135 UNSCHEDULED OPERATORS**

The enclosed document is a proposed revision to Federal Aviation Regulations Parts 135.263, 135.267 and 135.269. Presented to the Aviation Rulemaking Advisory Committee on Flight/Duty Rest requirements Working Group, December 9, 1993.

This document has been prepared in conjunction with NATA, HAI, and the NBAA air charter committees representing over 2,000 FAR Part 135 on demand certificate holders.

PROPOSED PREAMBLE TO CHANGE FAR'S 135.263, 135.267 AND 135.269

SUMMARY: This rule amends flight time limitations and rest requirements for flight crewmembers engaged in unscheduled air transportation. These rule changes are based on recommendations of the Aviation Rule Making Advisory Committee's Flight/Duty/Rest Requirements Working Group composed of persons who represent the interests affected by the flight and duty time rules changes. These rule changes are designed to clarify and define certain requirements that have had voluminous interpretations.

SUPPLEMENTARY INFORMATION

BACKGROUND

On June 15, 1992 the Federal Aviation Administration announced the establishment of a Flight Crewmember Flight/Duty/Rest Requirements Working Group in Volume 57, Number 115, Page 26685 of the Federal Register. The working group task was: "To determine whether regulations pertaining to air carrier flight crewmember, flight, duty and rest requirements are consistently interpreted and understood by the FAA, Certificate Holders and Flight Crewmembers. To evaluate industry compliance and practice regarding scheduling of duty, reserve, and rest periods and investigate reports of excessive pilot fatigue that may occur as a result of such scheduling. And if appropriate, develop recommendations for advisory material and regulatory revision."

Through the many meetings of the Working Group in 1992 and 1993, it was quickly determined that flight crewmember duty and rest requirements were misunderstood by the both industry and the FAA and that the concept of "Reserve" needed to be added to the FARs. The Working Group did find that the interpretations issued by the Chief Counsel's office of the FAA were consistent in regard to flight time limitations, but in regard to duty and rest time there is an ongoing misunderstanding and there was nothing addressing Reserve.

The Working Group determined that the only way to correct the misunderstandings of the current rule was to make a regulatory revision. The intent of this proposed revision is not to rewrite the existing rule but to clarify the existing misunderstandings by adding specific definitions and requirements to the existing rule and eliminating the need for regulation through interpretation. This revision is the "Unscheduled" duty time limitations and rest requirements only. The provisions of these rules are designed for unscheduled operations and should not be attributed to scheduled operations covered in other parts (subparts and sections) of the FAR.

In unscheduled, on demand flight operations a certificate holder must be able to provide air transportation service to the general public on demand 24 hours a day, 7 days a week 365 days a year. Providing this service is the sole reason for this business.

By definition unscheduled, on demand means just that, no schedule and at the demand of the customer. This poses some problems in scheduling a flight crewmember's duty time and rest time because the certificate holder may not know when the next duty assignment is going to be.

The FAA's General Counsel has stated in several interpretations that rest must be prospective in nature, the crewmember must know when to expect his rest. The question in this regard is how is a certificate holder to provide prospective rest if he doesn't know when he is going to need to assign a crewmember to a duty assignment?

This proposal has addressed this issue. We have provided several concepts and definitions that in some fashion are already being used by both unscheduled and scheduled certificate holders. Many of these concepts are controversial and require a slight adjustment in the way in which crew scheduling is considered.

This proposal is not meant to rewrite the current rule but, it is meant to clarify the existing rule by providing specific definitions and guidelines, and the introduction of new concepts that will make FAR compliance easier.

We all agree that the primary consideration is that there is a fully qualified and rested flight crew flying our aircraft. In this proposal it is our intent to assure rest and implement the new concept of rest called Reserve. By providing specific definitions and incorporating them into the rule we hope to make the rule clearer, making flight and duty time simpler to understand. In some cases these definitions and explanations may appear to be contradictory but each concept applies to a separate set of circumstances and is designed to apply to any type of unscheduled, on demand certificate holder's operation.

In FAR Part 135 unscheduled, on demand flight operations a flight crewmember's time can be defined in three categories, Duty Time, Flight Time and Rest.

Duty time can be defined as the time a flight crewmember is assigned to duties and responsibilities (restrained) by a certificate holder.

These Duties and responsibilities assigned by the certificate holder could be any one or a combination of the following:

- Flying
- Office Duties
- Ground/Flight/Simulator training for the certificate holder
- Random Drug/Alcohol Testing
- Standby Reserve, or
- Any other duties a certificate holder may assign a flight crewmember.

Any time a certificate holder **assigns** any duties and responsibilities to a crewmember, that crewmember must be considered **on duty**.

Flight Time can be defined as the time a flight crewmember moves an airplane for the purposes of commercial flight for a certificate holder.

Rest is generally described as the time a flight crewmember is given free from all duties and responsibilities (restraints) of a certificate holder. A certificate holder cannot dictate how a crewmember spends his time in rest and certainly cannot tell the crewmember when he should sleep.

Rest can be considered to come in the following categories:

- Required Rest
- Assigned Rest, and
- Reserve

Required Rest is the required thirteen 24 hour rest periods in each calendar quarter and the required 10 consecutive hours within the preceding 24 hours of a planned completion of a duty assignment, with specific rest extension requirements if flight and/or duty time were extended.

A crewmember in Required Rest is on his own time, free from all obligation to the certificate holder and the certificate holder has no control over how the crewmember spends his time. The crewmember may paint his house run a marathon, or plow a field. His only responsibility is to be prepared for either a duty assignment or to go into Reserve status upon completion of a Required Rest period.

While a crewmember is in required rest however, a certificate holder may contact him with information about a future duty assignment, after his rest period, without interrupting the rest period. The certificate holder **shall not** require the crewmember to be available for contact during any Required or Assigned rest period or while in Reserve.

A certificate holder must schedule the thirteen 24 hour rest periods in each quarter in advance to assure the prospectivity of this rest. This may be done on a weekly, monthly or quarterly basis depending on the type of operations.

Assigned Rest is rest assigned by a certificate holder either at the end of a short duty day or to assure there is at least 10 consecutive hours of rest before the next duty assignment. A flight crewmember who is put into an assigned rest period may be recalled to duty if the need arises. If, the crewmember can be contacted, and if the new assignment is planned to be completed within the 14 hour duty period that began when the crewmember originally reported for duty.

A reassignment of duty may not take place if the crewmember is in Required Rest, i.e., that rest he must have upon completion of a 14 hour duty period or one of the required thirteen 24 hour rest periods.

A new concept in crewmember assignment is to plan a crewmember's time around a "Duty Period". This Duty is the time beginning when the certificate holder required the crewmember to report for duty and ends 14 hours later. During this 14 hour period the certificate holder may assign the crewmember to any of the duties and responsibilities described earlier. However in assigning this duty period the certificate holder must look back to assure there has been at least 10 consecutive hours of Required Rest, Assigned Rest or Reserve since the last duty assignment and, that the current flight assignment can be completed in the prescribed flight time limitations within the 24 hours preceding the planned completion of the flight assignment.

In utilizing the concept of a duty period and scheduling a crewmember for a defined duty period based on when duties are assigned by the certificate holder, the crewmember knows when his duty period begins and ends and when his Required Rest period begins and ends, in advance, prospectively. The crewmember knows when he is given a duty assignment that he will be on duty for up to 14 hours and that he will have at least 10 consecutive hours of Required Rest before either being assigned to another duty period or before going into Reserve status.

If the crewmember were being assigned to back to back duty assignments it would be obvious that assuring at least 10 consecutive hours of rest after the 14 hour duty period would be in compliance with the rule requiring 10 hours of rest within the preceding 24 hours of the completion of a duty assignment.

The problem arises however, that if a crewmember has had not been assigned a duty period for several days prior to a new duty assignment how is the certificate holder to assure the crewmember has had the rest required before performing any duties for that certificate holder?

The concept of Reserve can remedy this situation.

A crewmember who has completed a duty assignment, and who has had at least 10 consecutive hours of Required Rest will, unless other arrangements have been made with the certificate holder, go into Reserve status if there are no immediate duty assignments available for the crewmember.

This Reserve status is the same as rest in all ways other than the crewmember may be contacted for a duty assignment and if he accepts the duty assignment he must report to the airport within a reasonable amount of time.

Reserve is the term for a flight crewmember who currently has no specific duties or responsibilities to the certificate holder, in rest, but who may be available, under specific conditions, for a duty assignment should one arise.

The purpose of Reserve is to provide the certificate holder with a pool of reserve crewmembers who are off duty, on their own time, free of all present duties and responsibilities (restraints) of a certificate holder, and who are considered in rest **until and if**, the crewmembers are contacted **and** the crewmembers **accept** a duty assignment. The crewmember, if he accepts the duty assignment will go on the 14 hour duty clock when he reports for duty.

This concept is to provide the certificate holder with the versatility to comply with the on demand nature of unscheduled FAR Part 135 operations.

The very concept of Reserve is controversial in that it must be considered rest in order for it to work. In this proposal we have provided a specific set of circumstances that allows Reserve to be considered rest.

The concept of Reserve is comprised of two elements, a duty element and a rest element.

- Reserve, rest.
- Standby Reserve, duty.

Reserve refers to a flight crewmember who is off duty, on his own time. Free of all duties and responsibilities (restraints) of a certificate holder and who is considered in rest **until he is contacted and he accepts** a duty assignment.

A flight crewmember who is in Reserve status **may refuse** a duty assignment if he feels unfit for that duty assignment without retribution from the certificate holder. With a crewmember in Reserve the certificate holder must accept the crewmember's judgment as to his fitness for a duty assignment.

Some examples of the considerations a crewmember may make for fitness for a duty assignment would be:

- If he felt adequately rested for the planned duty assignment.
- If he has no immediate physical impediments that would affect his ability to perform the duty assignment, i.e., sprained ankle or broken arm etc., or
- Is he under major life stress, i.e. death in the family, or divorce, etc., that would affect his ability to perform the duty assignment, and
- Is he in compliance with FAR 91.17 (alcohol and drug use).....

To assure Reserve can be considered rest we have provided certain conditions that **must** be met to assure the crewmember has had a defined amount of rest before going into Reserve status and that the crewmember has control over his time.

These conditions are:

- A crewmember may only be placed into Reserve status after the crewmember has completed at least 10 consecutive hours of rest since his last duty assignment.
- A crewmember who is in Reserve status has **no** responsibilities to the certificate holder, he is off duty, **until, and if, he is contacted and he accepts** a duty assignment.
- A crewmember who is in Reserve status **may refuse** a duty assignment if he feels in any way unfit for that duty assignment, without fear of retribution from the certificate holder.

In Reserve a crewmember is not waiting or holding himself available for a duty assignment and the certificate holder **may not require** the crewmember be available to be contacted while the crewmember is in Reserve status. The crewmember has no present responsibilities to the certificate holder until **he accepts** a duty assignment.

The key element in being able to call Reserve rest is that the **crewmember** has **control** over his time, he has been given at least 10 consecutive hours of Required Rest before going into Reserve status and, if he is contacted for a duty assignment he may accept or refuse the duty assignment. The certificate holder must accept the crewmember's refusal and go on to another crewmember.

A crewmember may be contacted by phone, portable phone or any other means the crewmember and the certificate holder may arrange. However, while a crewmember in Reserve status the certificate holder **may not require** that he be available for contact.

The fact that a crewmember may have a portable phone or pager as a means of being contacted by a certificate holder **shall not** be construed in any way as restraint by a certificate holder (duty). The only time a pager or portable phone shall be considered restraint, (duty) is when the certificate holder specifically **assigns** the crewmember to **standby** for contact for a duty assignment **using** a portable phone or pager as the primary means of contact, i.e. the certificate holder puts the crewmember into Standby Reserve status.

Reserve is **not** to be considered a duty assignment and does not fall under the duty time limitations of 135.267 (proposed). In Reserve the crewmember has no obligation to the certificate holder until he accepts a duty assignment.

Standby Reserve **is** a duty assignment. In Standby Reserve the certificate holder has **assigned** a crewmember to standby either at the Airport, a Hotel/Motel, at Home or other designated location waiting to be contacted by phone or pager for a duty assignment. This crewmember is **on duty** from the time he reports for Standby Reserve to the time he is released or until the 14 hour duty period ends. Standby Reserve is an assigned duty and cannot be considered any form of rest.

A crewmember cannot be assigned to Standby Reserve unless:

- He has had at least 10 consecutive hours of Required or Assigned Rest or Reserve since his last duty assignment, or
- He has time remaining in his current duty period and the planned duty assignment will end within the original duty period.

A crewmember who is in Standby Reserve must be able to report for duty within a reasonable amount of time when assigned to a duty assignment.

COMMENTS ON THE PROPOSED RULE

RESERVED FOR THE FAA

THE FARs AFFECTED

FAR Part 135.267

- (a) No change.
- (b) No change.
- (c) No change.
- (d) No change.
- (e) No change.
- (f) No change.
- (g) New paragraph. Added to define Duty Time and Duty assignment periods.
- (h) New paragraph. Added to provide maximum time limit to Duty Time.
- (i) New paragraph. Added to define Required Rest.
- (j) New paragraph. Added to define Assigned Rest.
- (k) New paragraph. Added to provide duty time contingencies in the event unforeseen circumstances arise that lead to an extension of Duty Time and to required "compensatory" rest periods in the event Duty Time limitations are extended.
- (l) New paragraph. Added to define "Reserve
- (m) New paragraph. Added to assure 10 consecutive hours of rest prior to Reserve or Standby Reserve.
- (n) Renumbered paragraph. Same wording as current FAR 135.267(f) with revisions to be made for dates of new changes.

FAR Part 135.269

- (a) No change.
- (b) No change.
- (c) New paragraph. Added to define Duty Time and Duty assignment periods.
- (d) Renumbered paragraph. Same wording as FAR 135.269(c).
- (e) Renumbered paragraph. Same wording as FAR 135.269(d).
- (f) New paragraph. Added to define "Reserve".

SECTION BY SECTION DISCUSSION

FAR Part 135.267

- (a) No change.
- (b) No change.
- (c) No change.
- (d) No change.
- (e) No change.
- (f) No change.
- (g) FARs currently do not provide a definition of Duty Time, when it begins or when it ends. This paragraph provides this definition of Duty Time. Additionally, just as in the flight time limitations, it provides for at least 10 hours of rest within the 24 hours preceding the planned completion of a Duty assignment.

To assure he is providing for required rest the certificate holder, as he does with flight time, must determine the planned completion of the duty assignment and look back 24 hours to assure the crewmember had at least 10 consecutive hours of rest. This rest may be Required Rest, Assigned Rest or Reserve.

Look-back from the planned completion of the planned flight time and duty assignment is key in a certificate holder assuring compliance with flight and duty time limitations.

In order for a certificate holder to assure he is providing required minimum rest he would put a crewmember into a minimum of 10 hours of rest at the end of a 14 hour duty assignment or when he releases the crewmember from duty. Any time a certificate holder puts a flight crewmember into Required Rest that crewmember is unavailable for 10 consecutive hours. A crewmember in Assigned Rest may be reassigned to a duty assignment under certain provisions specified in paragraph (i). As with flight time, the certificate holder may not assign a duty assignment to a crewmember who is in Required Rest.

- (h) This paragraph is added to define the maximum time a flight crewmember may be scheduled for a duty assignment. 14 hours in any 24 hour period.

(i) Current FARs do not clearly address when rest periods must be assigned and for how long. By adding this paragraph it is clear that a crewmember is required to have at least 10 consecutive hours of rest upon completion of a 14 hour duty period, before being assigned to another duty assignment, or before going into Reserve status.

This paragraph also provides the conditions that allow a crewmember to be recalled to duty and accept a duty assignment after being put into Assigned Rest.

(j) With duty time defined and given limitations there must be reasonable contingencies to provide for unforeseen circumstances that cause delays that may extend a flight crewmember's duty time beyond the duty time limitations. It is unrealistic to expect a certificate holder to terminate a trip and strand a customer because due to unforeseen circumstances the flight crewmember may exceed his duty period.

However it is the certificate holder's responsibility to plan a duty assignment in such a manner that the assignment can be completed within the prescribed crewmember's duty and flight time limitations. The certificate holder shall make every effort to assure the duty assignment can be reasonably expected to be completed within the prescribed limitations.

The FAA has defined in several interpretations that delays caused by late passengers, maintenance difficulties and adverse weather constitute circumstances beyond the control of the certificate holder and the crewmember and therefore are legitimate reasons to extend a crewmember's flight or duty time limitations.

This paragraph has been added to provide for such contingencies in generally the same manner that FAR Part 135.263(e) provides for flight time extensions. To assure that this duty time extension can not be used to cause a never ending duty period a limit to the duty time extension has been set. This limit is to be applied equally to all type of FAR part 135 on demand certificate holders.

This paragraph allows that if the duty assignment is scheduled to be completed within the 14 hour duty period but, due to reasons beyond the control of the certificate holder or the flight crewmember, (such as adverse weather conditions, delayed passengers, ATC delays) the Duty Assignment cannot be completed within the planned duty time period, the flight crewmember's duty time may be extended to a maximum of 16 hours. However, upon completion of this duty period, the crewmember must receive certain specified minimum hours of rest before being assigned to another duty assignment or going on Reserve status .

(k) The working environment of the on demand certificate holder is one in which his services can be available to the public on demand 24 hours a day, 7 days a week, 365 days a year. This service is geared to be available anytime the need arises.

To this end, the on demand certificate holder must have the flexibility gained by being able to place flight crewmembers into a Reserve status and consider this rest in order to be prepared to provide these services.

This paragraph defines the two types of reserve and when they are in effect.

1. Reserve
2. Standby Reserve

A flight crewmember must have completed at least 10 consecutive hours of rest since his last duty assignment before going into Reserve status. In Reserve status he may be contacted for a duty assignment, and if he feels fit for that assignment he must be able to report for duty within a reasonable amount of time.

Reserve *is not* considered to be duty time as defined in FAR 135.267. A crewmember in Reserve status is considered to be in rest until he is contacted and he accepts a duty assignment. He may turn down a duty assignment if he feels he is unfit for that duty assignment without fear of retribution from the certificate holder. However, if the crewmember accepts a duty assignment while in Reserve status his 14 hour duty period begins when he reports for duty.

Some examples of the considerations a crewmember may make for fitness of flight would be;

- If he felt adequately rested for the planned duty assignment.
- If he has no immediate physical impediments that would affect his ability to perform the duty assignment, i.e. sprained ankle or broken arm, etc., or
- Is under major life stress that would affect his ability to perform the duty assignment, i.e. death in the family or divorce, etc., and
- He is in compliance with FAR 91.17 (alcohol and drug use).....

The certificate holder must accept the flight crewmember's judgment that he is not fit for the proposed duty assignment when the crewmember is in Reserve status.

However, the crewmember is obligated to the certificate holder if he has been provided at least the minimum rest period from his last flight and is then assigned to a new duty assignment rather than being put in Reserve status.

A flight crewmember must have completed at least 10 consecutive hours of rest since his last duty assignment before being assigned to Standby Reserve

Standby Reserve *is* considered duty. In Standby Reserve the certificate holder has **assigned** a crewmember to standby for a flight assignment either at the airport or other place designated by the certificate holder. This crewmember is on duty from the time he reports for Standby Reserve to the time he is released or until the 14 hour duty period runs out.

Anytime a certificate holder **assigns** any duties and responsibilities to a crewmember that crewmember is to be considered **on duty**.

FAR Part 135.269

- (a) No change
- (b) No change
- (c) FARs currently do not provide a definition of Duty Time or when it begins or ends. This paragraph provides this definition of Duty Time. Additionally, just as in the flight time limitations, it provides for at least 10 hours of rest within the 24 hours preceding the planned completion of a flight assignment.
- (d) Renumbered paragraph. Same wording as FAR 135.269(c)
- (e) Renumbered paragraph. Same wording as FAR 135.269(d)
- (f) New paragraph. Defines the two types of reserve and when they are in effect.
 - 1. Reserve
 - 2. Standby Reserve

A flight crewmember must have completed at least 10 consecutive hours of rest since his last duty assignment before going into Reserve status. In Reserve status he is to be available to be contacted for a duty assignment and if he feels fit for that assignment he must be able to report for duty within a reasonable amount of time. A flight crewmember who is in Reserve status may turn down any duty assignment if he feels he is not fit for that duty assignment without retribution from the certificate holder.

**135.267 FLIGHT AND DUTY TIME LIMITATIONS AND REST
REQUIREMENTS: UNSCHEDULED ONE-TWO PILOT CREWS**

FLIGHT TIME

(a) No certificate holder may assign any flight crewmember, and no flight crewmember may accept an assignment, for flight time as a member of a one or two pilot crew if that crewmember's total flight time in all commercial flying will exceed -

- (1) 500 hours in any calendar quarter.
- (2) 800 hours in any two consecutive calendar quarters.
- (3) 1,400 hours in any calendar year.

(b) Except as provided in paragraph (c) of this section, during any 24 consecutive hours the total flight time of the assigned flight when added to any other commercial flying by that flight crewmember may not exceed -

- (1) 8 hours for a flight crew consisting of one pilot; or
- (2) 10 hours for a flight crew consisting of two pilots qualified under this Part for the operation being conducted.

(c) A flight crewmember's flight time may exceed the flight time limits of paragraph (b) of this section if the assigned flight time occurs during a regularly assigned duty period of no more than 14 hours and

- (1) If this duty period is immediately preceded by and followed by a required rest period of at least 10 consecutive hours of rest;
- (2) If flight time is assigned during this period, that total flight time when added to any other commercial flying by the flight crewmember may not exceed -

- (i) 8 hours for a flight crew consisting of one pilot; or
- (ii) 10 hours for a flight crew consisting of two pilots; and

- (3) If the combined duty and rest periods equal 24 hours.

(d) Each assignment under paragraph (b) of this section must provide for at least 10 consecutive hours of rest during the 24 hour period that precedes the planned completion time of the assignment.

(e) When a flight crewmember has exceeded the daily flight time limitations in this section, because of circumstances beyond the control of the certificate holder or flight crewmember (such as adverse weather conditions, ATC Delays), that flight crewmember must have a rest period before being assigned or accepting an assignment for flight time of at least -

(1) 11 consecutive hours of rest if the flight time limitation is exceeded by not more than 30 minutes;

(2) 12 consecutive hours of rest if the flight time limitation is exceeded by more than 30 minutes, but not more than 60 minutes; and

(3) 16 consecutive hours of rest if the flight time limitation is exceeded by more than 60 minutes.

(f) The certificate holder must provide each flight crewmember at least 13 rest periods of at least 24 consecutive hours each in each calendar quarter.

DUTY TIME

[(g) "Duty Time" is the time a certificate holder assigns a flight crewmember to specific duties and responsibilities. Duty time begins when a flight crewmember reports for duty and ends when the crewmember is released from that duty assignment.

[(1) No certificate holder may assign a flight crewmember and no flight crewmember may accept a duty assignment during the 24 consecutive hours preceding the planned completion of that assignment without a scheduled rest period of at least 10 consecutive hours.]

[(2) No certificate holder may assign a flight crewmember and no flight crewmember may accept a duty assignment during any required rest period.]

[(h) Except as provided in (k) of this section the maximum time a crewmember can be scheduled on duty is 14 hours in any 24 hour period for operations conducted under this section.]

REST

[(i) Required Rest is the time a flight crewmember is given free from all duties and responsibilities to the certificate holder. A certificate holder may not make any demands or impose any requirements on a crewmember in required rest.

(1) Upon completion of a duty period a flight crewmember must receive at least 10 consecutive hours of required rest before being assigned to another duty assignment or before going into Reserve status.]

[(j) Assigned Rest is the rest time assigned by the certificate holder for scheduling considerations to assure a crewmember has had at least 10 consecutive hours of rest prior to a specific duty assignment.

(1) A certificate holder may recall a flight crewmember to duty from Assigned Rest, and a flight crewmember may accept a recall to duty from Assigned Rest, provided that the recall was not in a Required Rest period, and that the new duty assignment is planned to be completed in accordance with limitations of (g)(1) of this section.]

[(k) A flight crewmember is not considered to be in violation of paragraph (h) if the duty assignment is planned to be completed within the 14 hour duty period but, due to reasons beyond the control of the certificate holder and the flight crewmember (such as adverse weather conditions, delayed passengers, ATC Delays, etc.) the Duty Assignment cannot be completed within the planned duty period, the crewmember's duty period may be extended to a maximum of 16 hours. However, he must have a rest period before being assigned to or accepting another duty assignment or going into Reserve, of at least -]

[(1) 11 consecutive hours of rest if the duty time limitation is exceeded by not more than 30 minutes.]

[(2) 12 consecutive hours of rest if the duty time limitation is exceeded by more than 30 minutes but not more than 60 minutes; and]

[(3) 16 consecutive hours of rest if the duty time limitation is exceeded by more than 60 minutes.]

RESERVE

[(l) The term "Reserve" is defined as a flight crewmember who currently has no specific duty assignments, who is in rest, but may be available for an assignment should one arise.

Reserve is made up of two elements:

(1) "Reserve" refers to a flight crewmember who is off duty, on his own time, free from all duties and responsibilities of the certificate holder and who is considered in rest until he is contacted and he accepts a duty assignment.

[(i) "Reserve" is **not** considered duty for the purposes of paragraph (g) of this section. For duty time limitation purposes, the "Reserve" crewmember's duty period begins when, and if, he reports for duty, at which time the provisions of paragraph (g) of this section commence.]

(ii) In Reserve a flight crewmember may refuse to accept a duty assignment if he feels he is not fit for that duty assignment without retribution from the certificate holder.]

[(2) . "Standby Reserve" *is* duty time, referring to a flight crewmember who has been **assigned** by the certificate holder to standby at a designated location waiting to be assigned to a duty assignment.

[(m) A flight crewmember may not go into Reserve or be assigned Standby Reserve unless he has received at least 10 consecutive hours of rest since his last duty assignment.]

*[(n)] The Director, Flight Standards Service may issue operations specifications authorizing a deviation from any specific requirement of this section if he finds that the deviation is justified to allow a certificate holder additional time, but in no case beyond [], to bring its operations into full compliance with the requirements of this section. Each application for a deviation must be submitted to the Director, Flight Standards Service before [] Each applicant for a deviation may continue to operate under the requirements of Subpart F of this part as in effect on [] until the Director, Flight Standards Service has responded to the deviation request.

* In order for FAR Part 135 Certificate holders to be able to develop procedures and revise their manuals to comply with the changes in this rule, we suggest that there be at least a 180 day implementation period from the time the rule goes into effect.

135.269 FLIGHT AND DUTY TIME LIMITATIONS AND REST REQUIREMENTS UNSCHEDULED THREE AND FOUR PILOT CREWS

FLIGHT TIME

(a) No certificate holder may assign any flight crewmember, and no flight crewmember may accept an assignment, for flight time as a member of a three or four pilot crew if that crewmember's total flight time in all commercial flying will exceed -

- (1) 500 hours in any calendar quarter.
- (2) 800 hours in any two consecutive calendar quarters.
- (3) 1,400 hours in any calendar year.

(b) No certificate holder may assign any pilot to a crew of three or four pilots, unless that assignment provides -

- (1) At least 10 consecutive hours of rest immediately preceding the assignment;
- (2) No more than 8 hours of flight deck duty in any 24 consecutive hours;
- (3) No more than 18 duty hours for a three pilot crew or 20 duty hours for a four pilot crew in any 24 consecutive hours;
- (4) No more than 12 hours aloft for a three pilot crew or 16 hours aloft for a four pilot crew during the maximum duty hours specified in paragraph (b)(3) of this section;
- (5) Adequate sleeping facilities on the aircraft for the relief pilot;
- (6) Upon completion of the assignment, a rest period of at least 12 hours;
- (7) For a three pilot crew, a crew which consists of at least the following:
 - (i) A pilot in command (PIC) who meets the applicable flight crewmember requirements of Subpart E of Part 135;
 - (ii) A PIC who meets the applicable flight crewmember requirements of Subpart E of Part 135, except those prescribed in Secs. 135.244 and 135.247; and
 - (iii) A second in command (SIC) who meets the SIC qualifications of Sec. 135.245.

(8) For a four pilot crew, at least three pilots who meet the conditions of paragraph (b)(7) of this section, plus a fourth pilot who meets the SIC qualifications of Sec. 135.245.

DUTY TIME

[(g) "Duty Time" is the time a certificate holder assigns a flight crewmember to specific duties and responsibilities. Duty time begins when a flight crewmember reports for duty and ends when the crewmember is released from that duty assignment.]

[(1) No certificate holder may assign a flight crewmember and no flight crewmember may accept a duty assignment during the 24 consecutive hours preceding the planned completion of that assignment without a scheduled rest period of at least 10 consecutive hours.]

[(2) No certificate holder may assign a flight crewmember and no flight crewmember may accept a duty assignment during any Required Rest period.]

RESERVE

[(h) The term "Reserve" is defined as a flight crewmember who currently has no specific duty assignments, who is in rest, but may be available for an assignment should one arise.]

Reserve is made up of two elements:

(1) "Reserve" refers to a flight crewmember who is off duty, on his own time, free from all duties and responsibilities of the certificate holder and who is considered in rest until he is contacted and he accepts a duty assignment.

[(i) "Reserve" is **not** considered duty for the purposes of paragraph (g) of this section. For duty time limitation purposes, the "Reserve" crewmember's duty period begins when, and if, he reports for duty, at which time the provisions of paragraph (g) of this section commence.]

(ii) In Reserve a flight crewmember may refuse to accept a duty assignment if he feels he is not fit for that duty assignment without retribution from the certificate holder.]

[(2) "Standby Reserve" **is** duty time, referring to a flight crewmember who has been **assigned** by the certificate holder to standby at a designated location waiting to be assigned to a duty assignment.

[(i) A flight crewmember may not go into Reserve or be assigned Standby Reserve unless he has received at least 10 consecutive hours of rest since his last duty assignment.]



SOUTHWEST

SOUTHWEST AIRLINES CO.

Barry S. Brown
Corporate Counsel

P. O. Box 36611
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(214) 904-4263

RECEIVED

JAN 21 1994

January 18, 1994

AMAS

Dr. Don Hudson
Aviation Medicine Advisory Service
12000 E. 47th Avenue, No. 117
Denver, CO 80239

Re: ARAC Flight/Duty/Rest Requirements Working Group

Dear Don:

Enclosed please find an additional copy of what became known as the "Southwest Proposal" presented at the October meeting of the Working Group held at our offices in Dallas, Texas, including the proposed Preamble. This submittal remains acceptable to Southwest Airlines Co. and Southwest Airlines Pilots Association.

Should you have any questions or require further information, please do not hesitate contacting either of us. We appreciate your efforts and consideration.

Southwest Airlines Co.

By: 

Barry S. Brown, Corporate Counsel

Southwest Airlines Pilots Association

By: 

Len Legge, Secretary/Treasurer

**121.471 FLIGHT TIME LIMITATIONS AND REST REQUIREMENTS:
ALL FLIGHT CREWMEMBERS**

(a) No domestic air carrier may schedule any flight crewmember and no flight crewmember may accept an assignment for flight time in scheduled air transportation or in other commercial flying if that crewmember's total flight time in all commercial flying will exceed:

- (1) 1,000 hours in any calendar year;
- (2) 100 hours in any calendar month;
- (3) 30 hours in any 7 consecutive days;
- (4) 8 hours between required rest periods.

(b) A flight crewmember is not considered to be in violation of the flight time limitations set forth in paragraph (a), above, if the flights to which he is assigned are scheduled and normally terminate within the limitations but due to circumstances beyond the control of the air carrier (such as adverse weather conditions), are not at the time of departure expected to reach their destination within the scheduled time.

(c) No domestic air carrier may schedule a flight crewmember and no flight crewmember may accept an assignment for flight time without an actual rest period of at least 10 consecutive hours:

(1) During the 24 consecutive hours preceding the scheduled completion of any flight segment if the scheduled flight time is contained totally within the consecutive time period 0500 - 0259, inclusive, based upon the crewmember's domicile time; or

(2) During the 22 consecutive hours preceding the scheduled completion of any flight segment if the scheduled flight time is not contained totally within the consecutive time period 0500 - 0259, inclusive, based upon the crewmember's domicile time.

(d) The 10 hours prior rest required under paragraphs (c)(1) and (2) may be reduced in actual operation due to circumstances beyond the control of the carrier to a minimum of 9 hours if the flight crewmember receives a rest period of at least 11 hours beginning no later than 24 hours after the commencement of the reduced rest period.

(e) No domestic air carrier may assign, nor may any flight crewmember perform, any flight time with the air carrier unless the flight crewmember has

received the rest required by this section. A flight crewmember is not considered to be in violation of this subparagraph if, at the actual time of departure, the scheduled duration of the flight segment to which the flight crewmember is assigned would normally fall within the limitations of this subparagraph, but, due to circumstances beyond the control of the carrier which occur after departure, the flight does not reach the destination within the limitations of this subparagraph.

(f) Each domestic air carrier shall relieve each flight crewmember engaged in scheduled air transportation from all further duty for at least 24 consecutive hours during any 7 consecutive days.

(g) No domestic air carrier may assign any flight crewmember and no flight crewmember may accept assignment to any duty with the air carrier during any required rest period.

(h) Time spent in transportation, not local in character, that an air carrier requires of a flight crewmember and provides to transport the crewmember to an airport at which he is to serve on a flight as a crewmember, or from an airport at which he was relieved from duty to return to his home station, is not considered part of a rest period.

(i) Reserve: To provide an adequate, predictable and protected rest period to a flight crewmember on reserve status, unless alternative conditions are approved by the Administrator in accordance with the Preamble, flight crewmember reserve status shall be subject to the following:

(1) A 'standby reserve' is a flight crewmember who is required:

(a) to be at a location specified by the air carrier; or

(b) to report to a location specified by the air carrier on less than 2 hours notice.

Time spent subject to (a) and/or (b), above, is considered time engaged in scheduled air transportation and is not considered rest.

(2) An 'on-call reserve' is a flight crewmember who is required to report to a location specified by the air carrier on notice of 2 hours or more. If one of the following conditions is satisfied, an on-call reserve shall be considered at rest until report at a location specified by the air carrier:

(a) Each domestic air carrier shall provide each on-call reserve at least 8 consecutive hours of rest in any 24 consecutive hours. The rest period may not shift more than 3 hours UTC earlier or later than the preceding rest period, nor may it shift more than 8

hours in any 7 consecutive days. At a minimum, the air carrier must inform the flight crewmember at the beginning of each 24 hour period on reserve as to when the 8 consecutive hour rest period will occur, or

(b) A minimum of 10 hours of advance notice of assignment and the crewmember is released to rest, or

(c) Scheduled flight time to which the reserve is assigned is contained totally within 0600 - 0000 domicile time (inclusive), or

(d) The total sum of:

(i) on call reserve time and,

(ii) time engaged in scheduled air transportation

shall not exceed 18 hours if the flight time is contained within 0500 and 0259 domicile time, inclusive; and 16 hours if the flight time includes any flight time during and/or both before and after 0300 and 0459 domicile time. For purposes of calculating on call reserve time, the time period 0001 through 1000, domicile time, shall be excluded therefrom if, and only if, the flight crewmember is not contacted by, or required to contact, the air carrier during such period.

(3) If an air carrier complies with paragraph 2 (c) above, it may assign a flight crewmember to flight time which is scheduled to occur during the period of 0600 - 0000 hours, domicile time, subject to the flight time limitations and rest requirements of this section.

**MODIFICATIONS TO 14 CFR PARTS 121.471:
FLIGHT CREWMEMBER FLIGHT TIME
LIMITATIONS AND REST REQUIREMENTS**

SUMMARY

The proposed rewrite of 14 CFR 121.471 would amend the current rule regulating flight time limitations and rest requirements for flight crewmembers engaged in air transportation. The proposed rule is based upon discussions had and concerns expressed by the flight/duty/rest working group formed under the auspices of the Operations Council of the Aviation Rulemaking Advisory Committee, a working group composed of persons who represent the interests affected by the flight time rules. The proposed rule clarifies certain requirements that have had voluminous interpretations and updates certain requirements in relation to current operating conditions, addresses concerns regarding "back side of the clock" flying, and provides definition for flight crewmember reserve status.

BACKGROUND

Air crewmember fatigue is a fundamental factor of flight safety. The flight time limitation rules regulate the number of flight hours a flight crewmember may be scheduled for in a year, month, week, and in between rest periods and the frequency and length of rest periods that a flight crewmember must receive, in the interest of both individual and public safety. Studies of pilot fatigue, sleep, and circadian rhythms indicate that special attention should be given to flight activity which occurs during and/or both before and after the time period 0300 - 0459 (the "backside of the clock"). Additionally, major concerns were expressed regarding providing a

predictable rest period for flight crewmembers serving on reserve status, that is, flight crewmembers without definitive flight time schedules, but subject to call by the air carrier to perform flight time.

Flight time limitation rules were amended in 1985 after having been virtually unchanged for the thirty years prior thereto. The most significant reasons for amending the 1985 Rule are:

- 1. To clarify that flight crewmembers must not be subject to continuous duty assignments. Specifically, rest, in accordance with the rule, must actually be received by the flight crewmember, not merely scheduled;**
- 2. To provide that the flight crewmember flying during and/or both before and after the back side of the clock hours receives the rest required within a shorter period preceding the flight time; and**
- 3. To provide the flight crewmember with adequate, predictable, and protected rest while on reserve status, while, at the same time, preserving the flexibility of the air carrier in establishing reserve status procedures within economical cost parameters.**

INTENT OF THE RULE

While there were numerous other issues discussed by the ARAC Working Group, it became apparent that, due to the multitude of variables involved, not all issues could be resolved. In focusing on the three major objectives -- eliminating continuous duty, addressing back side of the clock flying, and providing adequate and predictable rest to reserve status flight crewmembers --, however, the ARAC Working

Group believes that a framework has been created by which the FAA can interpret and address these other issues.

GENERAL ISSUES

In that the proposed rule reenacts a substantial portion of the 1985 Rule, the discussion of general issues in the preamble to the 1985 Rule (Federal Register, Vol. 50, No. 138, pages 29308 through and including 29315) remains pertinent and should be reemphasized, with the specific understanding that scheduled rest must actually be received by the flight crewmember, excepting only those specific instances where, for reasons beyond the control of the air carrier, the received rest is reduced, in which case, compensatory rest must follow. Additionally, interpretation of the 1985 Rule preamble must be modified to consider the elimination of the air carrier's ability to schedule flight time based upon reduced rest. The only manner in which a required rest period may be reduced is when such reduced rest results from operational circumstances beyond the control of the air carrier. The additional issues addressed by this proposed rule -- continuous duty, back side of the clock flying, and reserve status will be addressed in the following Section by Section Discussion.

SECTION BY SECTION DISCUSSION

- **Section 121, Subpart Q -- Flight Time Limitations and Rest Requirements:**
Domestic Air Carriers --

Subpart Q of Part 121 consists of Sections 121.470 and 121.471. No changes were made to Section 121.470. The following sections describe the proposed changes relative to the 1985 Rule and discuss the issues related to such changes.

● **Section 121.471 -- Flight Time Limitations and Rest Requirements: All Flight Crewmembers --**

(a) No changes are proposed for this paragraph.

(b) This paragraph substantially recodifies what is paragraph (g) of the 1985 Rule. The proposed rule relocates this paragraph for purposes of emphasizing and clarifying its applicability to paragraph (a). To further clarify this paragraph's applicability to paragraph (a), a specific reference to paragraph (a) is incorporated. The actual change to former paragraph (g) involves substituting the phrase "in violation of the flight time limitations set forth in paragraph (a), above," for the phrase "scheduled for flight time in excess of flight time limitations". This change is intended to clarify for the flight crewmember, as well as for the air carrier, that, in the event circumstances beyond the control of the air carrier occur which cause the flight crewmember to exceed the flight time limitations, no violation will be deemed to have occurred.

(c) The proposed modification of what was paragraph (b) of the 1985 Rule is intended to simplify the rest requirements by providing a ten consecutive hour rest period regardless of the total scheduled flight time. By eliminating the variable rest required dependent upon scheduled flight time, the calculation of rest required to be received becomes much simpler. The "looking back" concept adopted by the 1985 Rule is continued; however, the period of the look back is reduced from twenty-four consecutive hours preceding the scheduled completion of any flight segment to 22 consecutive hours preceding the scheduled completion of any flight segment under circumstances where the scheduled flight time is not contained totally within the

consecutive time period 0500 - 0259, inclusive. This shortened look back period addresses scheduled flight time which occurs during and/or both before and after the time period 0300 - 0459 by effectively limiting such a crewmember's duty period to twelve hours (thirteen hours due to circumstances beyond the carrier's control (under which circumstances a reduced rest period would result requiring compensatory rest pursuant to proposed paragraph (d), following)). (See Figure 1 for pertinent examples).

(d) Proposed paragraph (d) is intended to replace subparagraph (c) of the 1985 Rule. Proposed (d) allows for rest to be reduced to a minimum of nine hours in actual operation. Eliminated are the ability of the carrier to schedule based upon reduced rest as well as the ability, under any circumstances, to reduce rest below nine hours. Further, in the event a ten-hour rest period is reduced to nine hours, the immediately subsequent rest period received must be at least eleven hours, thereby providing compensatory rest to the flight crewmember.

In line with the simplification of 1985 Rule (b), the proposed modification simplifies what was subparagraph (c) of the 1985 Rule by allowing the rest period to be reduced only in actual operation. While some air carriers indicated that their current practices included scheduling based upon reduced rest, these carriers acknowledged that elimination of this ability would not materially, adversely impact their operations.

The ten-hour required rest period could be effectively reduced to nine hours in either of two ways. The first would involve the extension of the flight crewmember's duty period to fifteen hours after completion of the ten consecutive

hour prior rest period, thereby reducing the prior rest period to nine hours. The second would result when the flight crewmember's scheduled rest period was ten hours and the previous duty period's flight time extended up to one hour into the scheduled rest period. (See Figure 2). In either event, the flight crewmember must receive a minimum compensatory rest of 11 hours commencing no later than twenty-four hours from the commencement of the reduced rest period.

(e) Proposed paragraph (e) is a modification of what was subparagraph (c)(4) of the 1985 Rule. In the first sentence of this paragraph, the word "received" replaces the word "had" from subparagraph (c)(4) of the 1985 Rule. This change is intended to eliminate any ambiguity regarding the requirement that the flight crewmember must actually receive the applicable rest period prescribed by this section. Further, by making this a separate paragraph of the Section, the possibility of continuous duty assignment is eliminated.

The second sentence of proposed paragraph (e) is intended to address unanticipated, inflight delays to clarify that flight crewmember will not violate the requirements due to such a delay.

(f) Proposed paragraph (f) reenacts paragraph (d) of the 1985 Rule, without change.

(g) Proposed paragraph (g) reenacts paragraph (e) of the 1985 Rule, without change.

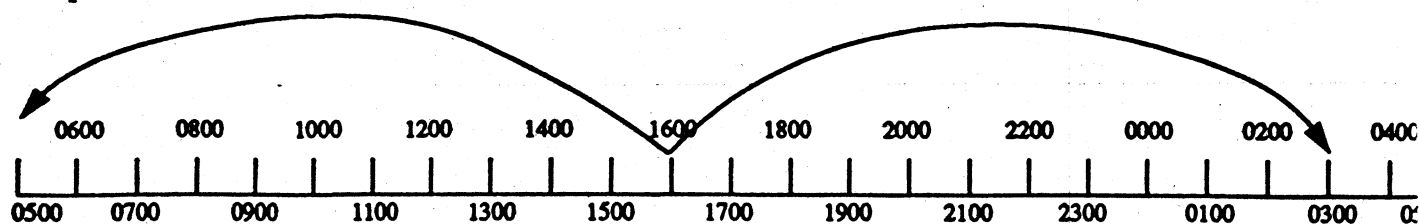
(h) Proposed paragraph (h) reenacts paragraph (f) of the 1985 Rule, without change.

(i) Proposed paragraph (i) is a new paragraph which addresses the two types of reserve flight crewmembers utilized in the domestic air carrier industry. The two primary purposes of this paragraph are (i) to assure that flight crewmembers on reserve status are provided an adequate, predictable, and protected rest period while on reserve; and (ii) to clarify when a reserve flight crewmember is considered "engaged in scheduled air transportation" vis a vis "at rest." A "standby reserve" is considered engaged in scheduled air transportation at all times. The intent of the definition of "standby reserve" is to include any flight crewmember whose time and/or location is materially restricted by the air carrier. Accordingly, in addition to those flight crewmembers subject to the express definition of "standby reserve," a flight crewmember who is required to phone crew scheduling frequently and regularly, such as every hour, must be considered on "standby reserve," and therefore, not "at rest." An "on-call reserve" is a flight crewmember whose activities are not materially restricted by the air carrier, and an "on-call reserve" is considered at rest so long as one of the conditions set forth in subparagraph (2) of paragraph (i) is satisfied.

Further flexibility is provided to the air carrier to apply to the Administrator for approval of other conditions not specified in this section. The absolute prerequisite for approval of other conditions is that an adequate, predictable, and protected rest period must be provided regardless of the alternative. An example of such an alternative would be provision by the carrier to the flight crewmember of an adequate and reliable reserve and flight scheduling information system which would allow an on-call reserve flight crewmember to plan for a flight time assignment or to anticipate, under normal circumstances, when a flight time assignment will

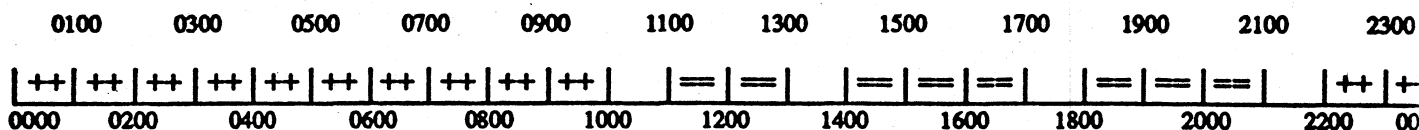
occur. Further, the air carrier must keep foremost in its operations the obligation of a flight crewmember pursuant to 14 C.F.R. Section 91.13(a) to notify the air carrier if the flight crewmember is so fatigued that he is not capable of safely operating an aircraft.

If the Flight Time is within 0500 - 0259, consecutive, Lookback is 24 hours from scheduled flight completion.

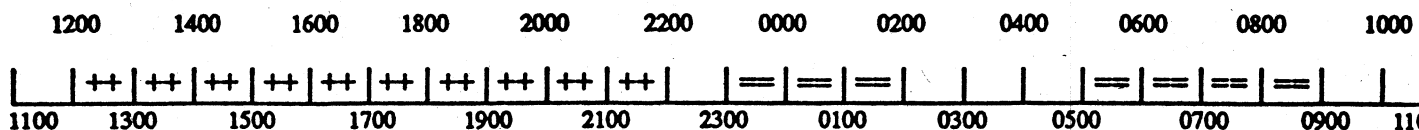


Otherwise, lookback is 22 hours from scheduled flight completion.

24 Hour Lookback: Scheduled Flight Time Completion: 24 hour Lookback from 2100: 10 hours consecutive r
0000 - 1000 ∴ LEGAL:



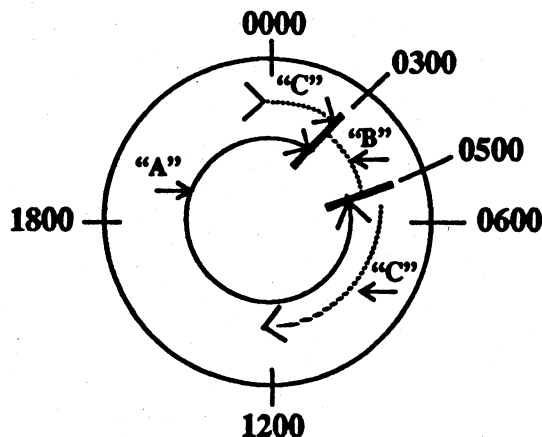
22 Hour Lookback: Scheduled Flight Time Completion 0900, But commencing prior to 0300 ∴ Not with
0500 - 0259, consecutive, Lookback 22 hours:



[+] Rest (received)

[=] Scheduled Flight Time

24 Hour Clock:

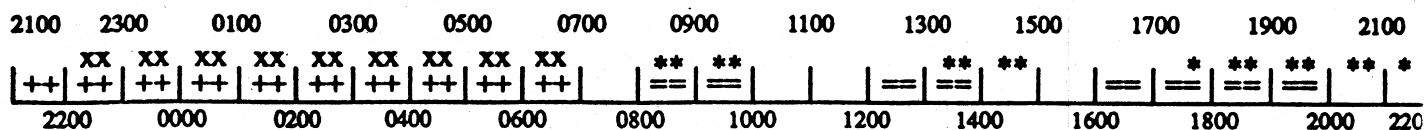


"A" - Flight Time totally contained within 0500-0259, consecutive, requires 24 hour lookback for receipt of 1
hours REST.

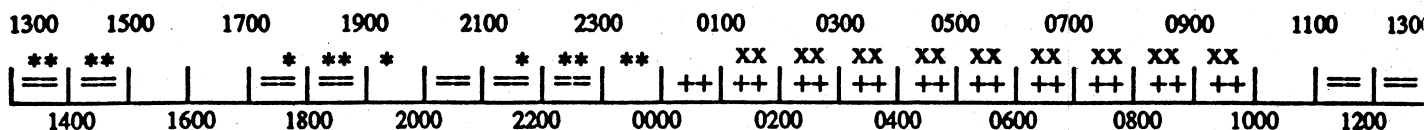
"B" and "C" - Flight Time Touches "B" or contained in "C", (that is, not totally contained within 0500-0259
consecutive) requires 22 hour Lookback for Receipt of 10 hours REST.

FIGURE 1

- #1 Scheduled & Received Rest - 2100 - 0700
 Scheduled Flight Time Completion - 2000
 Actual Flight Time Completion - 2200. 24 hour Lookback renders
 Received Rest 2200 - 0700 = 9 hours •• 11 hour compensatory rest must commence by 2200 on day two

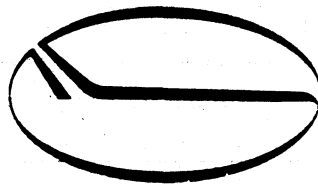


- #2 Scheduled Flight Time Completion - 2300
 Actual Flight Time Completion - 0030
 Scheduled REST (10 Hours) - 0000 - 1000
 Actual REST (9 Hours) - 0100 - 1000 •• Flight Crewmember may accept assignment commencing 1100 day two but must receive 11 hour compensatory rest commencing no later than 0100 day three.



- [++] Scheduled Rest
 [=] Scheduled Flight Time
 [xx] Received Rest
 [••] Actual Flight Time

FIGURE 2



Air Transport Association

Albert H. Prest
Vice President, Operations

June 23, 1994

Donald E. Hudson, M.D.
Aviation Medicine Advisory Service
1200 East 47th Avenue
Suite 117
Denver, CO 80239

Re: Flight Limitations/Rest Requirements Working Group

Dear Don:

As you know, we previously submitted a joint ATA/RAA report and recommendations for regulatory action with regard to this issue. The purpose of this letter is to summarize the position of the airline participants to the working group on pilot flight limits and rest requirements for domestic operations. At the risk of being long-winded, I have included the background as we know it.

The issue of rest for reserve pilots prior to a flight assignment led to the formation of this ARAC Working Group. The issue grew out of FAA's interpretation of rest requirements as applied to on-demand operators, but became a problem for the scheduled airlines, including ATA members, when FAA concluded that its interpretation applied to scheduled operations. In essence, FAA concluded that pilots on scheduled reserve status are "on duty" and not "resting" for purposes of meeting FAA rest requirements. This interpretation is inconsistent with airline practices developed over the past 40 years. Its application to the industry would cost hundreds of millions of dollars in additional pilot hirings.

Because of the controversy surrounding this issue and related duty and fatigue issues, FAA set up an ARAC Working Group to address reserve rest and related fatigue issues. The working group, comprised of pilot union representatives (the "labor coalition") and airline management representatives, was given the ill-defined task of reviewing the entire set of rest requirements and flight time limits for domestic flight operations and making appropriate recommendations to modify existing regulations. Given the make-up of this group, the discussions took on the tone and appearance of labor negotiations rather than a collegial effort to carefully define a safety issue and to develop a specific, tailored solution. We point to this as a fundamental problem that inhibited the efforts of this particular Working Group.

Donald E. Hudson, M.D.
June 23, 1994
Page Two

ATA and RAA took the position that three major issues warranted attention. These issues were: (a) "indefinite" duty situations caused by irregular operations, (b) flight crew fatigue associated with night-time flying (so-called "backside of the clock" flying), and (c) rest for reserve flight crewmembers. The labor coalition took a more expansive view of the task, but ultimately agreed to focus on these issues.

In numerous meetings over eighteen months, the Working Group achieved virtual consensus on new regulatory language addressing the indefinite duty issue, and partial consensus on new regulatory language concerning the reserve rest issue -- differing primarily over the extent of carrier flexibility to provide pilots with an opportunity to rest prior to a flight assignment. With respect to the backside of the clock issue, consensus was not reached. ATA recommended advisory and educational material regarding fatigue and established counter-measures. In our view, the labor coalition's position that such advisory material would be inadequate illustrates its goal of using the Working Group to improve the position of its members when negotiating collective bargaining agreements with individual airlines. The labor coalition pushed for specific and fairly severe regulatory limitations.

Prior to the last meeting in December 1993, it became apparent that further progress could not be made absent significant concessions by either side. As a result, the Working Group concluded its efforts without reaching consensus. Competing recommendations were submitted by ATA and the labor coalition to the Working Group Chairman for submission to the FAA. A third recommendation was submitted jointly by Southwest Airlines and its pilot union.

Thereafter, FAA requested the Working Group to hold one final meeting to see if a consensus could be developed that would allow submission of a single document to FAA. A final meeting was held on May 5, 1994, but no change in positions occurred.

Summarized below are the ATA/RAA positions on the issues noted above.

a. Indefinite Duty. The first, and easiest, issue to address was an FAA interpretation that had the effect of allowing pilots to be kept on duty indefinitely as a result of operational irregularities. Early in the process it was agreed that the underlying rule clearly was not intended to create indefinite duty periods. Rulemaking language was drafted that would eliminate that potential and agreement in principle was reached on clarifying language. This new rule, if promulgated, would negate FAA's ill-advised interpretation.

Donald E. Hudson, M.D.

June 23, 1994

Page Three

b. **Flight Crew Fatigue.** The second major topic of discussion centered around sleep physiology, fatigue countermeasures and alertness management. This is a complex subject because application of available scientific data on fatigue and sleep deprivation to working environments, including the airplane cockpit, is not yet mature, and because of the nature of commercial aviation. Commercial aviation is a dynamic, 24-hour enterprise comprised of organizations with diverse operations and cultures. It is not possible to develop a single rule that (i) accommodates the differing demands on passenger and cargo operations and (ii) that accounts for the infinite variables associated with night flying, time zone changes, mixing crews from different domiciles, etc.

Given these unavoidable circumstances, the best way to address fatigue issues is to develop a comprehensive package of educational and advisory materials aimed at the broadest range of the industry, including both day and night operations, and both scheduled and non-scheduled operations. This should be an industry-wide initiative. This type of approach lends itself to the use of numerous examples of flight pairings, operational situations and other methods of instruction. A joint government/industry produced video might also be appropriate to supplement written advisory material. There is legitimate scientific and industry expertise available that would support such a project.

c. **Reserve Rest.** FAA's view that pilots working for Part 121 and 135 operators in scheduled service who are assigned to reserve status duty -- as opposed to pilots working for on-demand part 135 operators who are placed on reserve during or between trips -- must be given prospective rest before a flight assignment was completely unexpected and is, in our view, wrong. The FAA's interpretation is contrary to the manner in which airlines have operated for decades. In effect, it constitutes a rule change without a cost-benefit analysis and without the public scrutiny afforded by the formal rulemaking process. Neither FAA nor members of the working group have been able to demonstrate that this interpretation would enhance safety in the scheduled operations environment, and certainly there has been no cost justification. The cost to the industry would be in the hundreds of millions of dollars in increased crew costs if this interpretation were enforced against ATA and RAA members.

The real issue is how to provide pilots assigned to reserve status the opportunity to rest before a flight assignment. Because no two airlines operate identically, different airlines have developed over the years different ways of providing their pilots an opportunity to rest. What works for one airline may not work for another. Consequently, five alternatives were proposed that would ensure an on-call reserve pilot is provided an opportunity for rest prior to flight assignment. These alternatives account for a broad range of circumstances that allow an operator to choose a method of compliance that is cost effective and that satisfies the safety goal of the rule. This approach is analogous to the Advanced Qualification Program developed by FAA and ATA over the last few years. The goal of each alternative

Donald E. Hudson, M.D.
June 23, 1994
Page Four

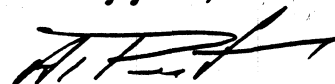
is to provide the on-call reserve pilot an opportunity for rest by either: (1) a defined specific rest period, (2) advance notification of flight assignment, (3) flight assignments that account for the pilot's sleep cycle, (4) limited flight segment, or (5) other similar means that ensure an opportunity for adequate prospective rest. Existing working agreements are assumed to satisfy this last alternative.

In conclusion, we believe that the changes urged by the labor coalition are excessive and cannot be supported by science or a specific, identified safety defect in scheduled airline operations. The generalized concerns about fatigue which the labor coalition consistently pointed to -- and which we share -- are insufficient to serve as the bootstrap for wholesale revisions to the present regulations. The ATA and RAA member airlines already have responded to these concerns in their scheduling practices pursuant to collective bargaining agreements and work rules. The focused rule changes that we have recommended, together with the suggested education effort on fatigue countermeasures, would enhance existing practices without strangling the industry.

Finally, I note that FAA does not have the authority, much less the resources, to act as the protector of pilot rights in the context of individual disciplinary actions. Much was said about this in the discussions, but it is an issue that is wholly outside the realm of FAA's mission. Existing state and federal employment laws are adequate to protect all employees -- including pilots -- from unlawful conduct.

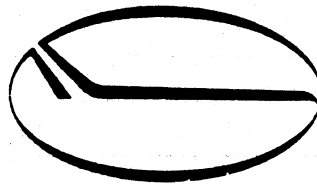
We appreciate your efforts as Chairman of the Working Group. You demonstrated considerable skill and patience in fulfilling a difficult task under trying circumstances.

Sincerely yours,



Albert H. Prest
Vice President - Operations

cc: Bill Edmunds



Air Transport Association

Albert H. Prest
Vice President, Operations

June 23, 1994

Donald E. Hudson, M.D.
Aviation Medicine Advisory Service
1200 East 47th Avenue
Suite 117
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Re: Flight Limitations/Rest Requirements Working Group

Dear Don:

As you know, we previously submitted a joint ATA/RAA report and recommendations for regulatory action with regard to this issue. The purpose of this letter is to summarize the position of the airline participants to the working group on pilot flight limits and rest requirements for domestic operations. At the risk of being long-winded, I have included the background as we know it.

The issue of rest for reserve pilots prior to a flight assignment led to the formation of this ARAC Working Group. The issue grew out of FAA's interpretation of rest requirements as applied to on-demand operators, but became a problem for the scheduled airlines, including ATA members, when FAA concluded that its interpretation applied to scheduled operations. In essence, FAA concluded that pilots on scheduled reserve status are "on duty" and not "resting" for purposes of meeting FAA rest requirements. This interpretation is inconsistent with airline practices developed over the past 40 years. Its application to the industry would cost hundreds of millions of dollars in additional pilot hirings.

Because of the controversy surrounding this issue and related duty and fatigue issues, FAA set up an ARAC Working Group to address reserve rest and related fatigue issues. The working group, comprised of pilot union representatives (the "labor coalition") and airline management representatives, was given the ill-defined task of reviewing the entire set of rest requirements and flight time limits for domestic flight operations and making appropriate recommendations to modify existing regulations. Given the make-up of this group, the discussions took on the tone and appearance of labor negotiations rather than a collegial effort to carefully define a safety issue and to develop a specific, tailored solution. We point to this as a fundamental problem that inhibited the efforts of this particular Working Group.

Donald E. Hudson, M.D.

June 23, 1994

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ATA and RAA took the position that three major issues warranted attention. These issues were: (a) "indefinite" duty situations caused by irregular operations, (b) flight crew fatigue associated with night-time flying (so-called "backside of the clock" flying), and (c) rest for reserve flight crewmembers. The labor coalition took a more expansive view of the task, but ultimately agreed to focus on these issues.

In numerous meetings over eighteen months, the Working Group achieved virtual consensus on new regulatory language addressing the indefinite duty issue, and partial consensus on new regulatory language concerning the reserve rest issue -- differing primarily over the extent of carrier flexibility to provide pilots with an opportunity to rest prior to a flight assignment. With respect to the backside of the clock issue, consensus was not reached. ATA recommended advisory and educational material regarding fatigue and established counter-measures. In our view, the labor coalition's position that such advisory material would be inadequate illustrates its goal of using the Working Group to improve the position of its members when negotiating collective bargaining agreements with individual airlines. The labor coalition pushed for specific and fairly severe regulatory limitations.

Prior to the last meeting in December 1993, it became apparent that further progress could not be made absent significant concessions by either side. As a result, the Working Group concluded its efforts without reaching consensus. Competing recommendations were submitted by ATA and the labor coalition to the Working Group Chairman for submission to the FAA. A third recommendation was submitted jointly by Southwest Airlines and its pilot union.

Thereafter, FAA requested the Working Group to hold one final meeting to see if a consensus could be developed that would allow submission of a single document to FAA. A final meeting was held on May 5, 1994, but no change in positions occurred.

Summarized below are the ATA/RAA positions on the issues noted above.

a. Indefinite Duty. The first, and easiest, issue to address was an FAA interpretation that had the effect of allowing pilots to be kept on duty indefinitely as a result of operational irregularities. Early in the process it was agreed that the underlying rule clearly was not intended to create indefinite duty periods. Rulemaking language was drafted that would eliminate that potential and agreement in principle was reached on clarifying language. This new rule, if promulgated, would negate FAA's ill-advised interpretation.

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b. **Flight Crew Fatigue.** The second major topic of discussion centered around sleep physiology, fatigue countermeasures and alertness management. This is a complex subject because application of available scientific data on fatigue and sleep deprivation to working environments, including the airplane cockpit, is not yet mature, and because of the nature of commercial aviation. Commercial aviation is a dynamic, 24-hour enterprise comprised of organizations with diverse operations and cultures. It is not possible to develop a single rule that (i) accommodates the differing demands on passenger and cargo operations and (ii) that accounts for the infinite variables associated with night flying, time zone changes, mixing crews from different domiciles, etc.

Given these unavoidable circumstances, the best way to address fatigue issues is to develop a comprehensive package of educational and advisory materials aimed at the broadest range of the industry, including both day and night operations, and both scheduled and non-scheduled operations. This should be an industry-wide initiative. This type of approach lends itself to the use of numerous examples of flight pairings, operational situations and other methods of instruction. A joint government/industry produced video might also be appropriate to supplement written advisory material. There is legitimate scientific and industry expertise available that would support such a project.

c. **Reserve Rest.** FAA's view that pilots working for Part 121 and 135 operators in scheduled service who are assigned to reserve status duty -- as opposed to pilots working for on-demand part 135 operators who are placed on reserve during or between trips -- must be given prospective rest before a flight assignment was completely unexpected and is, in our view, wrong. The FAA's interpretation is contrary to the manner in which airlines have operated for decades. In effect, it constitutes a rule change without a cost-benefit analysis and without the public scrutiny afforded by the formal rulemaking process. Neither FAA nor members of the working group have been able to demonstrate that this interpretation would enhance safety in the scheduled operations environment, and certainly there has been no cost justification. The cost to the industry would be in the hundreds of millions of dollars in increased crew costs if this interpretation were enforced against ATA and RAA members.

The real issue is how to provide pilots assigned to reserve status the opportunity to rest before a flight assignment. Because no two airlines operate identically, different airlines have developed over the years different ways of providing their pilots an opportunity to rest. What works for one airline may not work for another. Consequently, five alternatives were proposed that would ensure an on-call reserve pilot is provided an opportunity for rest prior to flight assignment. These alternatives account for a broad range of circumstances that allow an operator to choose a method of compliance that is cost effective and that satisfies the safety goal of the rule. This approach is analogous to the Advanced Qualification Program developed by FAA and ATA over the last few years. The goal of each alternative

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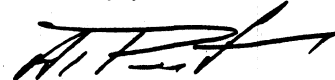
is to provide the on-call reserve pilot an opportunity for rest by either: (1) a defined specific rest period, (2) advance notification of flight assignment, (3) flight assignments that account for the pilot's sleep cycle, (4) limited flight segment, or (5) other similar means that ensure an opportunity for adequate prospective rest. Existing working agreements are assumed to satisfy this last alternative.

In conclusion, we believe that the changes urged by the labor coalition are excessive and cannot be supported by science or a specific, identified safety defect in scheduled airline operations. The generalized concerns about fatigue which the labor coalition consistently pointed to -- and which we share -- are insufficient to serve as the bootstrap for wholesale revisions to the present regulations. The ATA and RAA member airlines already have responded to these concerns in their scheduling practices pursuant to collective bargaining agreements and work rules. The focused rule changes that we have recommended, together with the suggested education effort on fatigue countermeasures, would enhance existing practices without strangling the industry.

Finally, I note that FAA does not have the authority, much less the resources, to act as the protector of pilot rights in the context of individual disciplinary actions. Much was said about this in the discussions, but it is an issue that is wholly outside the realm of FAA's mission. Existing state and federal employment laws are adequate to protect all employees -- including pilots -- from unlawful conduct.

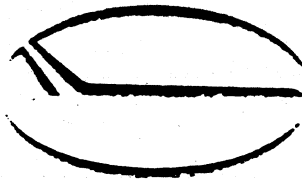
We appreciate your efforts as Chairman of the Working Group. You demonstrated considerable skill and patience in fulfilling a difficult task under trying circumstances.

Sincerely yours,



Albert H. Prest
Vice President - Operations

cc: Bill Edmunds



Air Transport Association

Albert H. Prest
Vice President, Operations

January 13, 1994

Dr. Don Hudson
ALPA
12000 East 47th Avenue, Suite 117
Denver, CO 80239

Subject: (1) Proposed revision to Parts 121.471 and 135.265
(2) ATA/RAA report

Dear Dr. Hudson: *Don,*

Enclosed is the ATA/RAA proposal to revise FAR §121.471 and 135.265 along with supporting preamble language that is also enclosed and labeled Report of the Air Transport Association and Regional Airline Association. It is my understanding that these documents will be distributed to members of the Operations Subcommittee (sic) for review and discussion at their February 15, 1994 meeting.

Don, I would like to take another opportunity to thank you for your commitment and leadership throughout this project. I believe the process was successful, particularly when considering that FAA's mission statement to the working group was overly broad and driven by abuses from certificate holders who were not conducting either scheduled Part 121 or 135 operations. Nevertheless, I am confident that when the attached proposed rule is studied it will be determined that its provisions go well beyond the original task while retaining the flexibility that airlines require to conduct their specific operations.

Thank you once again and I look forward to seeing you on the 15th.

Sincerely,

Albert H. Prest

Enclosure

cc: Mr. Bill Edmunds, ALPA

**REPORT
of the
AIR TRANSPORT ASSOCIATION
and
REGIONAL AIRLINE ASSOCIATION
members of the**

ARAC FLIGHT TIME/DUTY TIME/REST REQUIREMENTS WORKING GROUP

Background

The FAA announced the formation of a "Flight Time/Duty Time/Rest Requirements" working group in the operations issues area of the Aviation Rulemaking Advisory Committee in the Federal Register on June 15, 1992 (57 FR 26685). The assigned task of the working group was: "To determine whether regulations pertaining to air carrier flight crewmember, flight, duty, and rest requirements are consistently interpreted and understood by the FAA, air carriers, and pilots. Evaluate industry compliance/practices regarding scheduling of duty, reserve, and rest periods and reports of excessive pilot fatigue as a result of such scheduling. If appropriate, develop recommendations for advisory material and/or a regulatory revision."

After the appointment of a working group chairman, the group convened on February 18, 1993. The working group was made up of "all comers." Although a late attempt was made to comprise the group according to the procedure set forth in the Federal Register announcement of the formation of the group, composition continued to vary and grow during the groups existence, making continuity impossible and progress difficult. Though meeting attendance was not consistent, in general, the working group was comprised of representatives of air carriers, pilot and flight attendant unions, the FAA, NASA, and the NTSB.

In view of the exceptionally broad task statement, and in an attempt to define a work program that might be possible to accomplish, the working group elected to confine itself to the consideration of the domestic rules, specifically FAR 121, subpart Q and FAR 135, subpart F.

Discussion

In a wide-ranging discussion of the FAR, their interpretations and applications, and scientific findings regarding fatigue and various strategies to combat fatigue, three potential problem areas were defined and fairly well agreed upon, namely: duty periods that could extend indefinitely; flying during times when one would normally be sleeping (referred to as "back side of the clock flying") and ensuring that reserve flight crewmembers are adequately rested for a flight assignment.

The proposed solutions to these problem areas varied widely and some strayed into other areas. In particular, many suggestions ventured into areas normally reserved for collective bargaining, and both ATA and RAA found these efforts to use the ARAC process to achieve advantages for subsequent use at the bargaining table to be troubling and a continuous source of contention. Though the group met nine times (15 total days) over a period of 18 months, in the end, the working group was unable to achieve consensus on proposed advisory or regulatory material.

As a result, and in an effort to assist the FAA in developing solutions in a way that recognizes the realities of air carrier operations and does not unduly burden an industry already reeling under immense economic and regulatory pressures, the representatives of the Air Transport Association and the Regional Airline Association, on behalf of their member carriers, propose the following course of action: *First*, adopt tightly focused regulatory amendments (1) to close the door on indefinite duty periods and (2) to provide an assurance that reserve flight crewmembers are adequately rested for a flight assignment, codifying those historic airline practices that have provided that assurance. *Second*, convene a new ARAC working group tasked specifically to develop an advisory circular on Cockpit Alertness Management and Fatigue Countermeasures.

Proposed regulatory amendments

(Note: associated Part 135 proposed amendments are referenced parenthetically.)

121.471(a) [135.265(a)] No change.

121.471(b) Redesignate as paragraph (c) to allow for the subsequent redesignation of paragraph (g) to be paragraph (b). [135.265(b) no change]

121.471(c) Redesignate as paragraph (d). [135.265(c) no change]

121.471(d) Redesignate as paragraph (f) leaving a space for a new paragraph (e) described below. Also add a provision to allow the marking of time passage in 24-hour increments other than calendar days. The purpose of this paragraph is to provide a rest break of 24 consecutive hours each week. While the present regulation specifies only "7 consecutive days," the FAA's consistent interpretation has been that "days," unless otherwise modified, means "calendar days." For the purpose of this regulation, it is not necessary to pin the hours of relief from "all further duty" to calendar days. Indeed, doing so can lead to anomalous results, such as one hour of duty being considered a full day when the crewmember's assignment begins at 11:00 p.m. It is necessary only to treat an individual crewmember consistently ensuring that he has 24 consecutive hours off in a period of 168 consecutive hours (i.e., 7 days). In practice, some carriers have historically applied this regulation in the way proposed, but the regulation needs to be updated to avoid unnecessary enforcement action. [135.265(d) redesignated as paragraph (e) leaving space for new paragraph (d)]

121.471(e) Redesignate as paragraph (g).

121.471(f) Redesignate as paragraph (h).

121.471(g) It is proposed that FAR 121.471(g) be moved without change to the paragraph (b) position within the section to more clearly refer to the flight time limitations in paragraph (a). Its current position at the end of the section has caused unnecessary confusion as to what portions of the section it applies. There is universal agreement that it applies only to the flight time limits in paragraph (a).

New 121.471 (e) [New 135.265(d)] When rest requirements were introduced into Part 121 in the 1985 FAR amendment, it was not intended that a flight crewmember could continue on duty indefinitely simply because he never completed his legally scheduled flight time and therefore never got to his required rest time. However, in a highly technical analysis issued July 13, 1989, to T.M. Shanahan, Atlantic Southeast Airlines, the FAA Chief Counsel's office concluded that the current language permits such a result. There is at least anecdotal evidence that this interpretation has led to some abuses.

The proposed new paragraph establishes a "look back" test that says that at the time a flight segment would arrive at its destination based on its normally scheduled duration, one must be able to look back 24 hours from the arrival time and find at least the minimum rest required by this Section. If the minimum required rest cannot be found, the flight crewmember may not depart and must be released to rest, thereby foreclosing indefinite extensions of time on duty. In recognition of the many variables that come into play during actual operations, and to allow operational flexibility, the new paragraph allows the look back period to be extended by as much as 2 hours to a total of 26 hours. Furthermore, unforeseen delays that develop after an otherwise legal departure do not render illegal the completion of that flight segment. When "looking back," a complete rest period need not be found, provided the minimum rest required is found. For example, if the prior rest period was a compensatory 12 hour rest period, the look back is not restricted to the beginning of the rest period because that would unnecessarily restrict the following duty time to 12 hours. Instead, the look back is to that portion of the rest period (9 hours) that constitutes the minimum rest required by this Section. The look back may also be to an 8 hour rest period reduced pursuant to paragraph (d). On the other hand, this paragraph may not cause a rest period to be reduced. If a compensatory rest was required, or will be required, that rest must be completed before the flight crewmember may perform flight time duties.

New 121.471(i) [New 135.265(f)] Flight crewmembers generally fall into two distinct categories as regards flight assignments. "Line holders" or "schedule holders" have flight assignments known to them ahead of time, usually for a calendar month. "Reserves" do not have flight assignments known to them ahead of time, but instead, they are held "in reserve" to cover flights that for a variety of reasons are not covered by line or schedule holders. These two categories of flight crewmembers are faced with different challenges insofar as rest prior to a flight is concerned. The schedule holder knows when he is to fly and can rest accordingly. The reserve usually can be expected to maintain a normal day-night, wake-

sleep cycle. If his flight assignment takes place during his normal wake cycle, he can be presumed to be rested. Likewise, if he is given enough advance notice either of a flight assignment or a rest break, he can be presumed to be rested. Also, if the flight assignment involves no more than two flight segments, it is likely that a flight crewmember will be adequately rested for a flight assignment so limited.

Of reserve flight crewmembers, there are also two general categories: "standby reserves" and "on-call reserves," although individual carrier may have additional subcategories of reserves and may use different terminology to refer to reserves. Standby reserves have been called to the airport (or some nearby location) to be immediately available for a flight assignment. The restraint of their activity is so great that they are considered to be on duty for the purpose of flight and the rest requirements of this section apply to them whether or not they receive a flight assignment. On-call reserves are not restrained in their activities except that they must be able to be contacted, so the rest requirements of this section do not apply to them unless and until they participate in a flight assignment.

An on-call reserve is expected to be available for a flight assignment when called by the carrier. For a variety of reasons, such a call can come at any time of the day or night, and may involve little advance notification. By their nature, flight assignments to on-call reserves may present different rest considerations than those flight assignments carried out by crewmembers who know their assignments well in advance. Over the years, certain practices have developed to accommodate this situation. The rule proposed here is intended to codify those practices found to be adequate.

The rule provides several alternative means for ensuring that the on-call reserve has an adequate opportunity for rest prior to a flight assignment. Any of the alternatives in subparagraphs (a), (b), (c), (d) or (e) suffice to ensure that opportunity for rest, and only one of them need be adhered to for each individual on-call reserve. Furthermore, a different alternative can be used for different on-call reserves at a given carrier. For example, at a given carrier, one on-call reserve could be given a known 8-hour rest period during a 24-consecutive hour reserve period followed by a flight assignment; another, who had no known rest period during a reserve period, could be notified of a flight assignment 10 hours prior to a flight due to depart at 0400; another with no known rest period and little advance notice, could be notified of a flight assignment that is scheduled to operate entirely within the time period 0500-0000 or one that is limited to no more than two flight segments; and yet another, whose notification and assignment met none of the stipulations of the first four alternatives, but whose carrier had policies and procedures in place to allow the flight crewmember to anticipate a flight assignment or otherwise ensure that a flight assignment is not made to a flight crewmember who is not adequately rested for that flight assignment, could be assigned a flight. The goal of each of the alternatives is to provide a circumstance where the on-call reserve has an opportunity for rest: a defined rest period; a chance to rest before the flight; a normal night-time rest; a limited flight assignment; or other means whereby adequate rest for a particular flight assignment has occurred. In this last alternative, and indeed in every case, it is incumbent upon the on-call reserve not to accept a flight assignment for which he is not adequately rested.

The provision for "other means" in the fifth alternative acknowledges that there have been other satisfactory means in use for many years at a number of carriers beyond the specific means defined in the first four alternatives. Some carriers have flights that operate only during certain periods of the day. Other carriers have lists readily available to flight crewmembers that contain known unassigned flights and the order in which reserve crewmembers will be called for flight assignments. Still others have practices whereby the vast majority of reserve flight assignments are made during certain "assignment windows" of the day. The effect of all of these and other similar practices is to allow the crewmember to determine when he should rest so that it is likely he will be ready for a flight assignment when it comes. Furthermore, flight assignments differ considerably in many respects: the time the assignment starts in relation to the time of notification; the time of day the assignment starts; the time that has elapsed since the last flight assignment ended; the planned duration of the flight assignment; etc. All of these variables impact the question of adequate rest for the particular assignment. For example, a crewmember might be adequately rested for a short, one-segment ferry flight to position an aircraft, while not being adequately rested for a multi-segment or transcontinental flight. It is these variables that make it unnecessarily restrictive to define only the first four alternatives and not to leave room for "other means." When all is said and done, if the crewmember is not adequately rested for the particular flight assignment when it does come, it is incumbent upon that crewmember to decline that assignment, and it is incumbent upon the carrier to allow that assignment to be declined.

Proposed advisory material

During the discussions and study of the working group, a great deal was learned about sleep physiology, fatigue and fatigue countermeasures and alertness management. While the associated science has progressed in recent years, part of what has been learned is that fatigue is a very complex subject impacted by a large number of variables. It can be very unwise to attempt rulemaking in such a complex, evolving area especially when the need for regulation has not been clearly demonstrated. Rulemaking for flying on the back side of the clock or any of the other numerous aspects of fatigue is at least premature and perhaps impossible and unnecessary.

It is strongly suggested, though, that education on alertness management and fatigue countermeasures would be very beneficial and should be undertaken forthwith. Both individual flight crewmembers and airline companies can benefit from a better understanding of fatigue -- its causes, its remedies and a host of actions that have an impact on managing alertness in the cockpit. NASA studies, some of which have been funded by the FAA and participated in by airlines, provide much good information that could be included in an advisory circular in pursuit of this proposal.

Summary

The ARAC Flight Time/Duty Time/Rest Requirements working group has disbanded having concluded that consensus was not possible. Nonetheless, the ATA and RAA member carriers believe that identified problems can be solved by the tightly focused regulatory amendment proposals discussed and forwarded in this package and by the publication of an advisory circular on alertness management and fatigue countermeasures. Proposals that go beyond those made here are unnecessary and potentially harmful to the industry without providing any enhancement in flight safety and must therefore be rejected.

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PROPOSED 121.471

1/12/94

**121.471 FLIGHT TIME LIMITATIONS AND REST REQUIREMENTS:
ALL FLIGHT CREWMEMBERS**

(a) No domestic air carrier may schedule any flight crewmember and no flight crewmember may accept an assignment for flight time in scheduled air transportation or in other commercial flying if that crewmember's total flight time in all commercial flying will exceed:

- (1) 1,000 hours in any calendar year;
- (2) 100 hours in any calendar month;
- (3) 30 hours in any 7 consecutive days;
- (4) 8 hours between required rest periods.

(b) A flight crewmember is not considered to be scheduled for flight time in excess of flight time limitations, if the flights to which he is assigned are scheduled and normally terminate within the limitations but due to circumstances beyond the control of the air carrier (such as adverse weather conditions), are not at the time of departure expected to reach their destination within the scheduled time.

(c) Except as provided in paragraph (d) of this section, no domestic air carrier may schedule a flight crewmember and no flight crewmember may accept an assignment for flight time during the 24 consecutive hours preceding the scheduled completion of any flight segment without a scheduled rest period during that 24 hours of at least the following:

- (1) 9 consecutive hours of rest for less than 8 hours of scheduled flight time.
- (2) 10 consecutive hours of rest for 8 or more but less than 9 hours of scheduled flight time.
- (3) 11 consecutive hours of rest for 9 or more hours of scheduled flight time.

(d) An air carrier may schedule a flight crewmember for less than the rest required in paragraph (c) of this section or may reduce a scheduled rest under the following conditions:

- (1) A rest required under paragraph (c)(1) of this section may be scheduled for or reduced to a minimum of 8 hours if the flight crewmember is given a rest period of at least 10 hours that must begin no later than 24 hours after the commencement of the reduced rest period.
- (2) A rest required under paragraph (c)(2) of this section may be scheduled for or reduced to a minimum of 8 hours if the flight crewmember is given a rest period of at least 11 hours that must begin no later than 24 hours after the commencement of the reduced rest period.
- (3) A rest required under paragraph (c)(3) of this section may be scheduled for or reduced to a minimum of 9 hours if the flight crewmember is given a rest period of at least 12 hours that must begin no later than 24 hours after the commencement of the reduced rest period.

(e) No air carrier may assign, nor may any flight crewmember perform, any flight time during the 24 consecutive hours preceding the actual completion of any flight segment unless the flight crewmember has had the rest required by this section within that 24 hours. A flight crewmember is not considered to be in violation of this paragraph if at the actual time of departure the scheduled duration of the flight segment to which the flight crewmember is assigned would normally fall within the limitations of paragraphs (c) or (d) plus two hours, but due to circumstances beyond the control of the air carrier which occur after departure, the flight does not reach the destination within the limitations of this paragraph.

(f) Each domestic air carrier shall relieve each flight crewmember engaged in scheduled air transportation from all further duty for at least 24 consecutive hours during any 7 consecutive calendar days or any 168 consecutive hours from the beginning of a rest period required by this paragraph.

(g) No domestic air carrier may assign any flight crewmember and no flight crewmember may accept assignment to any duty with the air carrier during any required rest period.

(h) Time spent in transportation, not local in character, that an air carrier requires of a flight crewmember and provides to transport the crewmember to an airport at which he is to serve on a flight as a crewmember, or from an airport at which he was relieved from duty to return to his home station, is not considered part of a rest period.

(i) Reserve: Flight crewmember reserve status shall be subject to the following:

(1) A 'standby reserve' is a flight crewmember assigned to reserve status who is required to be at a location specified by the air carrier.

A standby reserve is considered engaged in scheduled air transportation and is not considered at rest.

(2) An 'on-call reserve' is a flight crewmember assigned to reserve status who must be available to report upon notice to a location specified by the air carrier. If one of the following conditions is satisfied, an on-call reserve shall be considered at rest until report at a location specified by the air carrier:

(a) The air carrier provides each on-call reserve at least 8 consecutive hours of rest in any 24 consecutive hours. At a minimum, the air carrier must inform the flight crewmember prior to the beginning of each 24 hour period on reserve as to when the 8 consecutive hour rest period will occur; or

(b) The air carrier provides a minimum of 10 hours of advance notice of assignment, and the flight crewmember is released to rest; or

(c) Scheduled flight time to which the reserve is assigned is contained totally within 0500 - 0000 domicile time (inclusive); or

(d) The reserve assignment is limited to two flight segments; or

(e) The air carrier has alternative policies and procedures or flight schedules that allow a flight crewmember to anticipate when a flight time assignment might occur or that otherwise ensure a flight crewmember will not be assigned to a flight unless that flight crewmember is adequately rested for that flight assignment.

Proposed 135.265
1/12/94

135.265 - Flight time limitations and rest requirements:
Scheduled operations.

(a) No certificate holder may schedule any flight crewmember, and no flight crewmember may accept an assignment, for flight time in scheduled operations or in other commercial flying if that crewmember's total flight time in all commercial flying will exceed:

- (1) 1,200 hours in any calendar year.
- (2) 120 hours in any calendar month.
- (3) 34 hours in any 7 consecutive days.
- (4) 8 hours during any 24 consecutive hours for a flight crew consisting of one pilot.
- (5) 8 hours between required rest periods for a flight crew consisting of two pilots qualified under this part for the operation being conducted.

(b) Except as provided in paragraph (c) of this section, no certificate holder may schedule a flight crewmember, and no flight crewmember may accept an assignment, for flight time during the 24 consecutive hours preceding the scheduled completion of any flight segment without a scheduled rest period during that 24 hours of at least the following:

- (1) 9 consecutive hours of rest for less than 8 hours of scheduled flight time.
- (2) 10 consecutive hours of rest for 8 or more but less than 9 hours of scheduled flight time.
- (3) 11 consecutive hours of rest for 9 or more hours of scheduled flight time.

(c) A certificate holder may schedule a flight crewmember for less than the rest required in paragraph (b) of this section or may reduce a scheduled rest under the following conditions:

- (1) A rest required under paragraph (b)(1) of this section may be scheduled for or reduced to a minimum of 8 hours if the flight crewmember is given a rest period of at least 10 hours that must begin no later than 24 hours after the commencement of the reduced rest period.
- (2) A rest required under paragraph (b)(2) of this section may be scheduled for or reduced to a minimum of 8 hours if the flight crewmember is given a rest period of at least 11 hours that must begin no later than 24 hours after the commencement of the reduced rest period.
- (3) A rest required under paragraph (b)(3) of this section may be scheduled for or reduced to a minimum of 9 hours if the flight crewmember is given a rest period of at least 12 hours that must begin no later than 24 hours after the commencement of the reduced rest period.

(d) No certificate holder may assign, nor may any flight crewmember perform any flight time during the 24 consecutive hours preceding the actual completion of any flight segment unless the flight crewmember has had the rest required by this section within that 24 hours. A flight crewmember is not considered to be in violation of this paragraph if at the actual time of departure the scheduled duration of the flight segment to which the flight crewmember is assigned would normally fall within the limitations of paragraph (b) or (c) plus two hours, but due to circumstances beyond the control of the carrier which occur after departure, the flight does not reach the destination within the limitations of this subparagraph.

(e) Each certificate holder shall relieve each flight crewmember engaged in scheduled air transportation from all further duty for at least 24 consecutive hours during any 7 consecutive days or any 168 consecutive hours from the beginning of the rest period required by this paragraph.

(f) Reserve: Flight crewmember reserve status shall be subject to the following:

- (1) A 'standby reserve' is a flight crewmember assigned to reserve status who is required to be at a location specified by the certificate holder.

A standby reserve is considered engaged in scheduled air transportation and is not considered at rest.

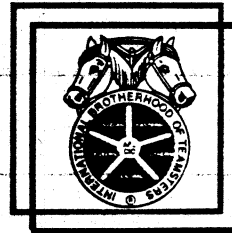
- (2) An 'on-call reserve' is a flight crewmember assigned to reserve status who must be available to report upon notice to a location specified by the certificate holder. If one of the following conditions is satisfied, an

on-call reserve shall be considered at rest until report at a location specified by the certificate holder:

- (a) The certificate holder provides each on-call reserve at least 8 consecutive hours of rest in any 24 consecutive hours. At a minimum, the certificate holder must inform the flight crewmember prior to the beginning of each 24 hour period on reserve as to when the 8 consecutive hour rest period will occur; or
- (b) The certificate holder provides a minimum of 10 hours of advance notice of assignment, and the flight crewmember is released to rest; or
- (c) Scheduled flight time to which the reserve is assigned is contained totally within 0500 - 0000 domicile time (inclusive); or
- (d) The reserve assignment is limited to two flight segments; or
- (e) The certificate holder has alternative policies and procedures or flight schedules that allow a flight crewmember to anticipate when a flight time assignment might occur or that otherwise ensure a flight crewmember will not be assigned to a flight unless that flight crewmember is adequately rested for that flight assignment.

INTERNATIONAL BROTHERHOOD OF TEAMSTERS

AFL-CIO



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June 16, 1994

ARAC submission by the Teamsters Airline Division as a Part 91 change to be attached to the Teamsters Airline Division submission, a rewrite of Subpart S, Supplemental Regulations.

Air carriers and commercial operators often have bonafide reasons for operating under Part 91, e.g., maintenance ferry flights, test flights, etc. Conversely, Part 91 is often improperly employed by operators in order to evade the limiting nature of the flight time limitations, duty time limitations, and rest provisions of Part 121 and Part 135 that are designed to ensure safety and to prevent careless and reckless operations. The following recommendation is intended to preclude such circumvention.

Air carriers or commercial operators operating under Part 91 shall be limited by the flight time limitations, duty time limitations, rest provisions, and the crew manning requirements of the Part normally operated under, i.e., Part 135, Part 121 Subparts Q (Domestic), R (Flag Air Carriers), and S (Supplemental Air Carriers and Commercial Operators).

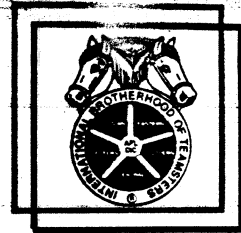
This modification should constrain operators from operating in a careless and reckless manner contrary to the interests of the public.

Sincerely,

Donald R. Treichler
Donald R. Treichler

INTERNATIONAL BROTHERHOOD OF TEAMSTERS

AFL-CIO



M. L. GRISWOLD, Director
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June 16, 1994

Teamsters Airline Division Proposal for Supplemental Rules § 121.500 - 507, Subpart S.

Comments. As has been raised repeatedly in the proceedings of the Aviation Rules Advisory Committee (ARAC), Subpart S, Supplemental rules, require substantial revision. Current Subpart S rules do not provide for a maximum duty time and they do not preclude air carriers or commercial operators from utilizing, on a flight by flight basis, Part 91 rules or Part 121 Domestic or Flag rules, whichever happen to be the least restrictive for the flight to be performed. Examples of abuse are tail end ferries under Part 91 that permit unlimited flight time and duty time. Air carriers and commercial operators interpret Part 91 to permit use of two crewmembers in a two crewmember cockpit aircraft for unlimited flight and duty periods and to permit use of unqualified crewmembers to perform crew duties without check airman supervision. The FAA also has interpreted Subpart S to permit domestic operations under such part which thereby enables the supplemental air carrier or commercial operator to schedule a three crewmember crew of a two crewmember cockpit aircraft to fly 12 hours of flight time and unlimited duty time while national or flag carriers flying over the same route are required to conform to domestic regulations, Subpart Q, that provides for a maximum of eight hours of flight time and 16 hours of duty time. In an international environment in 1993, a supplemental air carrier rescheduled a DC-8 crew in excess of 24 hours of duty. The crew crashed approaching 18 hours of duty. The NTSB cited the probable cause of the accident as fatigue and a primary contributing cause as the inadequacy of the regulations contained in Subpart S, supplemental regulations.

Attached is the Teamsters Airline Division proposal. It was formulated to correct the existing inadequacies of Subpart S. The proposal limits a supplemental air carrier or commercial operator from shifting operations between Parts. It requires the use of supplemental rules for flight time, duty time, and rest requirements when utilizing Part 91. It establishes flight time limits, duty time limits, and rest requirements inclusive of reserve rest. It requires the use of Subpart Q, domestic regulations, when operating wholly within the domestic regime. The proposal eliminates the 20 in 48 and the 24 in 72 rule and the one day off in seven rule since experience indicates that these rules are difficult to track and comply with and that crews feel that they do little to ensure rest or enhance safety. Further, the proposal introduces a flow sheet to visually depict the significant limits and requirements of the proposal. Throughout, the intent is to establish a regulation easily interpreted in the field and one that is not subject to constant modification by POI's and others that often results in the unsafe manipulation of the regulations to the detriment of the traveling public.

It is requested that this cover letter and attached proposal be included with the labor submission for the ARAC process on behalf of the Teamsters Airline Division.

Sincerely,

Donald R. Treichler
Donald R. Treichler

14 CFR §121 Subpart S
Flight Time Limitations, Duty Time Limitations, and Rest Requirements:
Supplemental Air Carriers and Commercial Operators and Crewmembers:
International Operations

§ 121.500 Applicability.

- (a) This subpart prescribes flight time limitations, duty time limitations, and rest requirements for supplemental air carriers, commercial operators, and crewmembers.
- (b) A supplemental air carrier or commercial operator scheduling and operating flights performed wholly within the Contiguous 48 States and the District of Columbia shall conform to Subpart Q, domestic rules, as relates to flight time limitations, duty time limitations, and rest requirements.
- (c) A supplemental air carrier or commercial operator operating international flights, to, from, or outside of the Contiguous 48 States and the District of Columbia, shall schedule and operate such flights under the rules of this part provided that all passengers enplaning and deplaning are departing for or returning from international destinations except for emergency deplaning for illness or other emergency situations.
- (d) A supplemental air carrier or commercial operator scheduling or a crewmember operating under more than one subpart shall be limited by the most restrictive limitation of said subparts except that an airman operating under this subpart may exceed 100 hours in 30 consecutive days provided that those hours in excess of 100 hours are acquired in international operations.
- (e) A supplemental air carrier or commercial operator scheduling and a crewmember operating in more than one type of crew, i.e., two (2) crewmember and three (3) crewmember crews, shall be limited by the most restrictive limitations applicable to said operations.
- (f) A supplemental air carrier or commercial operator, other than as herein stated, shall operate wholly under this subpart except, that operations may be conducted under subpart § 91, except flight time limitations, duty time limitations, and rest requirements applicable to such operations shall be scheduled under this subpart.
- (g) A supplemental air carrier or commercial operator shall utilize, in conducting operations, a communication system independent of the ATC system, domestic or foreign, and a dispatch system approved by the Administrator.

§ 121.501 Flight time limitations: Helicopters.

No supplemental air carrier or commercial operator may schedule a flight crewmember for duty aloft in helicopter operations subject to this part, or in any other commercial flying, that would exceed the flight time limitations prescribed in § 127.191.

§ 121.502 Flight Time Limitations: Crewmembers: Airplanes.

- (a) No supplemental air carrier or commercial operator may schedule and no crewmember may fly more than 120 hours during any 30 consecutive days.
- (b) No supplemental air carrier or commercial operator may schedule and no crewmember may fly more than 300 hours during any calendar quarter.
- (c) No supplemental air carrier or commercial operator may schedule and no crewmember may fly more than 1,000 hours in any 12 calendar month period.
- (d) No supplemental air carrier or commercial operator may schedule and no crewmember may fly, as part of a two (2) crewmember crew, more than eight (8) hours during any 24 consecutive hour period.
- (e) No supplemental air carrier or commercial operator may schedule and no crewmember may fly, as part of a three crewmember crew, more than 12 hours during any 24 consecutive hour period.
- (f) No supplemental air carrier or commercial operator may schedule and no crewmember may fly, as a part of an augmented crew, more than 16 hours during any 24 consecutive hour period.

§ 121.503 Duty Time Limitations: Crewmembers: Airplanes.

(a) No supplemental air carrier or commercial operator may schedule and no crewmember may perform more than 15 hours of duty in a 24 consecutive hour period provided the trip departure time occurs within the period 0630 through 2200 local time. The supplemental air carrier or commercial operator may dispatch and a crewmember may depart a flight that exceeds 15 hours of duty provided that the delay is unscheduled and beyond the control of the air carrier and provided that the prospective flight can be scheduled and flown in no more than 17 hours of duty. A further delay beyond 17 hours of duty, e.g., destination weather, will not be considered a violation of this subparagraph provided that the delay occurs after departure and, once landed, no more duty is performed by the crewmember until completion of required rest.

(b) No supplemental air carrier or commercial operator may schedule and no crewmember may perform more than 14 hours of duty in a 24 consecutive hour period whenever the trip departure time occurs within the period 2201 through 0629 local time. The supplemental air carrier or commercial operator may dispatch and a crewmember may depart a flight that exceeds 14 hours of duty provided that the delay is unscheduled and beyond the control of the air carrier and provided that the prospective flight can be scheduled and flown in no more than 16 hours of duty. A further delay beyond 16 hours of duty, e.g., destination weather, will not be considered a violation of this subparagraph provided that the delay occurs after departure and, once landed, no more duty is performed by the crewmember until completion of required rest.

(c) No supplemental air carrier or commercial operator may schedule and no crewmember may fly, as part of an augmented crew, i.e., two (2) captains and two (2) first officers of a two (2) crewmember cockpit aircraft or two (2) captains, two (2) flight engineers, and one first officer of a three (3) crewmember cockpit aircraft, more than 19 hours of duty with two (2) or less landings or more than 18 hours of duty with three (3) or less landings or more than 17 hours of duty with more than three (3) landings and said aircraft has rest facilities on board constructed and isolated to permit suitable rest and such facilities are approved by the administrator.

(d) Scheduled and actual duty time limitations prescribed in subparagraphs (a) and (b) above shall be reduced by one (1) hour for each landing in excess of seven (7) landings during any duty period.

§ 121.504 Reserve Duty: Crewmembers: Airplanes.

(a) **Reserve Rest: 11 Hours or Greater Report Time.** A supplemental air carrier or commercial operator may assign a crewmember a reserve duty period, with a report time of 11 hours or greater, for a maximum of 24 consecutive hours.

(b) **Reserve Rest: Less than 11 Hours Report Time.** A supplemental air carrier or commercial operator may schedule a reserve duty period, with a report time of less than 11 hours, for a maximum of 12 hours. Reserve duty, when combined with flight time and other duty time, shall not exceed 17 hours of total duty time unless required rest is provided.

§ 121.505 Rest Requirements: Crewmembers: Airplanes.

(a) A supplemental air carrier or commercial operator may schedule and a crewmember may perform flight time and duty time under this subpart provided the crewmember has been scheduled for and has received a minimum of 14 hours rest prior to the commencement of such flight or duty except that the 14 hours rest may be reduced to a minimum of 11 hours rest where there has previously occurred an unscheduled delay beyond the control of the air carrier, e.g., weather delays, ATC delays, or maintenance delays as opposed to rescheduling the flight for operational reasons such as passenger arrival or processing delays, and the crewmember receives a minimum of nine (9) hours uninterrupted rest in the hotel exclusive of transportation to and from the hotel. A crewmember having performed augmented flight time or duty time shall be provided a minimum of 18 hours of rest that may be reduced to 15 hours

with a minimum of 12 hours uninterrupted rest in the hotel for circumstances beyond the control of the air carrier as set forth in this paragraph..

(b) A supplemental air carrier or commercial operator shall provide a crewmember a minimum of 24 consecutive hours off free of all duty upon return to his operations base.

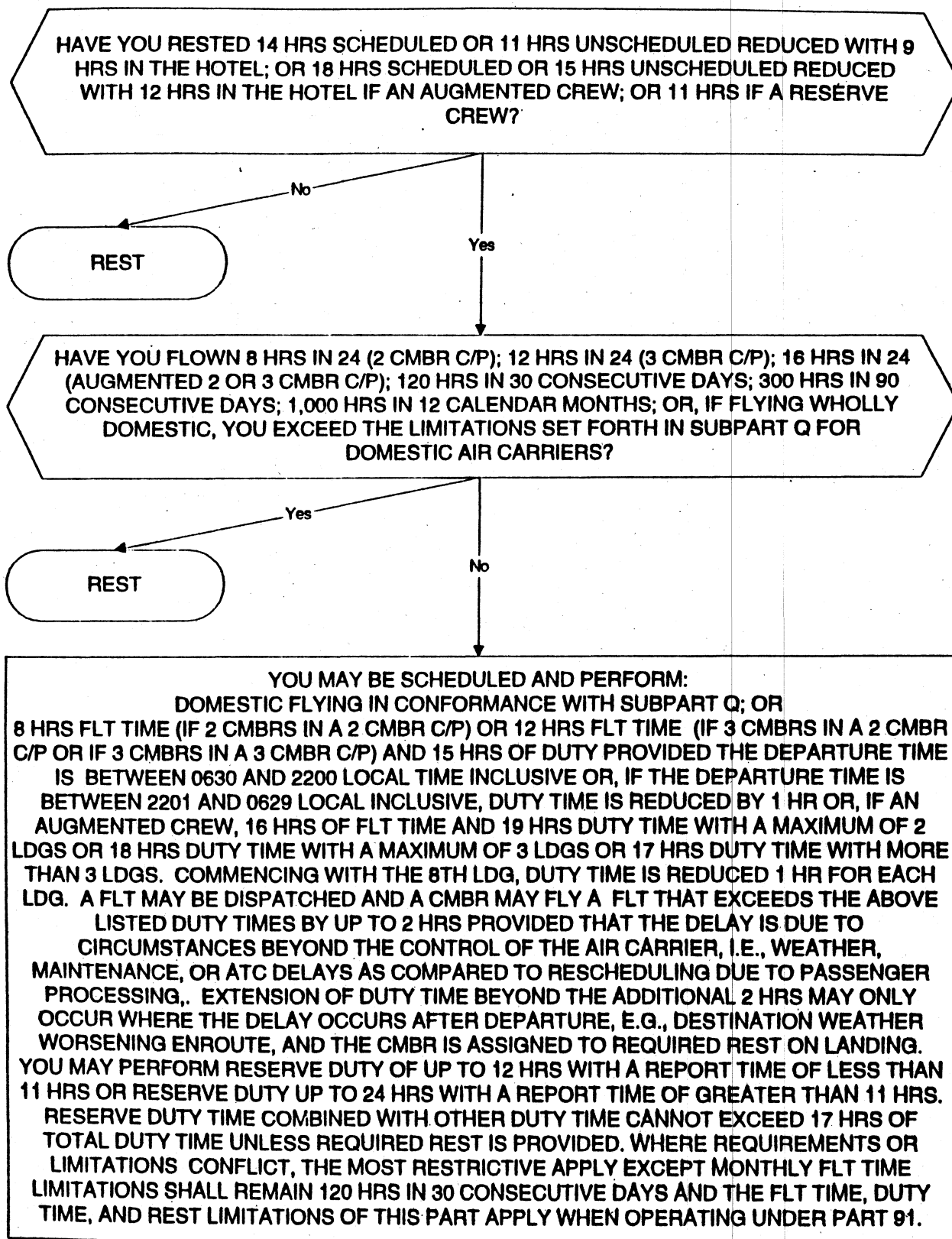
(c) A supplemental air carrier or commercial operator shall designate a rest period, free of all duty, of a minimum of 11 consecutive hours for a crewmember assigned reserve duty. The actual period of consecutive hours served on reserve duty, when combined with any subsequent duty time, shall not exceed 17 hours of total duty time since required rest was received.

(d) The air carrier shall furnish hotel accommodations that, at a minimum, shall provide sleeping, bath, and eating facilities or provision shall be made therefore.

§ 121.506 Flight Time Limitations: Other Commercial Flying: Airplanes.

No crewmember who is employed by a supplemental air carrier or commercial operator may do any other commercial flying, if that commercial flying plus his flying in operations under this part will exceed any flight time limitation in this part.

Part 121.507 Subpart S Flowchart
Flight Time Limitations, Duty Time Limitations, and Rest Requirements:
Supplemental Air Carriers, Commercial Operators, and Crewmembers: International Operations





Federal Register

**Thursday,
May 17, 2001**

Part II

Department of Transportation

Federal Aviation Administration

14 CFR Part 121

**Flight Crewmember Flight Time
Limitations and Rest Requirements; Final
Rule**

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 121****Flight Crewmember Flight Time Limitations and Rest Requirements**

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of enforcement policy.

SUMMARY: This notice of enforcement policy announces to the public the Federal Aviation Administration's (FAA's) intent to rigorously enforce its existing regulations governing flight crewmember rest requirements that are presently codified at 14 CFR 121.471. These regulations have been in existence since 1985, and it is the FAA's intention to ensure that the current rules, as interpreted, are followed by those whose conduct they govern. Accordingly, this notice publishes the FAA's long-standing construction of 14 CFR 121.471 and affords notice to affected certificate holders and flight crewmembers of the FAA's intent to enforce its rules in accordance with these interpretations. This policy statement is being given so those affected will have an opportunity to review their practices and, if necessary, come into full regulatory compliance.

DATES: This notice of enforcement policy is effective on May 17, 2001.

FOR FURTHER INFORMATION CONTACT: Alberta Brown, Air Transportation Division, AFS-200, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-8166.

SUPPLEMENTARY INFORMATION:**The Regulation**

The Civil Aeronautics Act of 1938 (52 Stat. 1007; as amended by 62 Stat. 1216, 49 U.S.C. 551) and subsequently the Federal Aviation Act of 1958 (now codified at 49 U.S.C. 40101 *et seq.*) addressed the issue of regulating flight crewmember hours of service. The FAA's governing statute empowers and directs the Secretary of Transportation to establish "regulations in the interest of safety for the maximum hours or periods of service of airmen and other employees of air carriers." 49 U.S.C. 44701(a)(4). The statute further provides the FAA with the authority to prescribe "regulations and minimum standards for other practices, methods, and procedures the Administrator finds necessary for safety in air commerce and national security." 49 U.S.C. 44701(a)(5).

The FAA's rules at 14 CFR 121.471(b) and (c) set forth flight time limitations

and rest requirements for domestic operations. These provisions state:

Section 121.471—Flight time limitations and rest requirements: All flight crewmembers

(b) Except as provided in paragraph (c) of this section, no certificate holder conducting domestic operations may schedule a flight crewmember and no flight crewmember may accept an assignment for flight time during the 24 consecutive hours preceding the scheduled completion of any flight segment without a scheduled rest period during that 24 hours of at least the following:

(1) 9 consecutive hours of rest for less than 8 hours of scheduled flight time.

(2) 10 consecutive hours of rest for 8 or more but less than 9 hours of scheduled flight time.

(3) 11 consecutive hours of rest for 9 or more hours of scheduled flight time.

(c) A certificate holder may schedule a flight crewmember for less than the rest required in paragraph (b) of this section or may reduce a scheduled rest under the following conditions:

(1) A rest required under paragraph (b)(1) of this section may be scheduled for or reduced to a minimum of 8 hours if the flight crewmember is given a rest period of at least 10 hours that must begin no later than 24 hours after the commencement of the reduced rest period.

(2) A rest required under paragraph (b)(2) of this section may be scheduled for or reduced to a minimum of 8 hours if the flight crewmember is given a rest period of at least 11 hours that must begin no later than 24 hours after the commencement of the reduced rest period.

(3) A rest required under paragraph (b)(3) of this section may be scheduled for or reduced to a minimum of 9 hours if the flight crewmember is given a rest period of at least 12 hours that must begin no later than 24 hours after the commencement of the reduced rest period.

(4) No air carrier may assign, nor may any flight crewmember perform any flight time with the air carrier unless the flight crewmember has had at least the minimum rest required under this paragraph.

In June 1999, FAA issued a notice of enforcement policy related to this rule. In that notice, the FAA clarified that the rules were applicable to all pilots operating in domestic scheduled operations. In December, 1999, FAA conducted a comprehensive review of air carrier scheduling practices and found that with one exception all operators were in compliance with the rule.

Interpretations of Rest Requirements

In part in response to the FAA's earlier focus on air carrier compliance with the flight and rest rules, the chairman of a national pilots union sent the FAA a letter posing a set of circumstances and inquiring about the applicability of 14 CFR 121.471 (b) and (c) to various scenarios. The FAA issued

a response that reflects the agency's long-standing construction of these regulatory provisions. That response is attached to this notice. In substance, the FAA reiterated that each flight crewmember must have had a minimum of 8 hours of rest in any 24 hour period that includes flight time. In addition, the interpretation reiterated that if a pilot's actual rest was less than 9 hours in the 24 hour period that included flight time, the next rest period must be lengthened to provide for the appropriate compensatory rest. The substance of the FAA response is contained in the Appendix.

After the interpretation was issued, many operators questioned whether this was consistent with earlier FAA interpretations. FAA met with representatives of the airlines as well as with organizations that represent them. At the meeting, the representatives stated that their approved scheduling systems had not been tracking the actual rest that a pilot had received in a 24-hour period that included flight time. The operators expressed concern that applying the rule as interpreted could reduce safety. They suggested that a pilot should not be diverted from important preflight and taxi-out duties by the need to constantly monitor whether he or she has had sufficient rest to finish the flight. They were particularly concerned about what might happen when there has been a lengthy ground delay and the flightcrew or the aircraft dispatcher determines that the flight cannot be completed within the rest requirements.

FAA met with representatives of the pilots unions. The pilots stated that in the vast majority of cases pilots are receiving the amount of rest required by the rule. However, they suggested that in a small number of operations it was possible that when a pilot completed his or her assigned flight schedule, he or she may have had less than 8 hours of rest in the preceding 24-hour period.

To ensure that the application of the rule would have no consequences that would reduce safety, the FAA considered all these concerns and all the information provided by the operators and the pilot unions. Although there may be some impacts to schedules and some delayed operations, FAA believes that safe operations require that a flight crewmember has a minimum of 8 hours rest in a 24 hour period that includes flight time. In addition, that flight crewmember must receive additional rest in the next rest period to compensate for any potential fatigue.

Compliance and Enforcement Plan

The FAA intends to rigorously enforce these regulations governing flight time restrictions and rest requirements. Accordingly, any noncompliance with the regulation should be corrected without delay.

For any air carriers that are not currently in compliance with these regulations, the FAA intends to take into consideration the certificate holder's good faith efforts to come into compliance in determining what, if any, enforcement action is appropriate if noncompliance is discovered. With regard to violations by individual flight

crewmembers, the FAA will consider the circumstances of each case, including such factors as the employing certificate holder's effort to come into compliance and the culpability of the individual.

While the FAA reserves the right to take appropriate action to address regulatory noncompliance, particularly in egregious circumstances, the FAA does not intend to target its inspection resources on this compliance issue at this time. However, this notice serves to advise air carriers, flight crewmembers, and the public that on [insert date (6 months from publication date)] the FAA

intends to begin a comprehensive review of certificate holders' flight scheduling practices and expects to deal stringently with any violations discovered.

Issued in Washington, DC, on May 14, 2001.

Margaret Gilligan,

Acting Associate Administrator for Regulation and Enforcement.

Appendix

Facts: A crew is assigned reserve standby duty commencing at 0600. They are then called at 0900 to check in for a flight assignment at 1100.

	End of rest	Report at	Release at	Sched. rest	Look-back rest
Day 1 0600		1100	2100	10:00	9:00
Day 2 0700		0700	1700	12:00	10:00

In the above example, assume that the crew was assigned to three segments with a total of less than 8 hours of flying in each duty period and that the scheduled block-in of the last flight of each day is 15 minutes prior to release. This original schedule does not require compensatory rest. I note, preliminarily, that your letter states that I should assume that the flight crew "was assigned to three segments with a total of less than 8 hours of flying in each duty period." I assume that by that statement you mean "less than a total of 8 hours of scheduled flight time for the three flight segments, on both Day 1 and Day 2." Based on that assumption, the regulations that I will apply are those that require a minimum of 9 consecutive hours of scheduled rest (section 121.471(b)(1)) that may be reduced to a minimum of 8 hours with a minimum of 10 hours compensatory rest that must begin no later than 24 hours after the commencement of the reduced rest (section 121.471(c)(1) (the "reduced/compensatory rest" exception)). I have also made other assumptions or clarifications that are described in my responses below.

Situation 1: On Day 1, all goes according to plan on the first two segments. However, after leaving the gate on the third segment, the crew encounters an unanticipated ground delay that results in only an 8 hour, 45 minutes look-back rest period upon termination at destination.

1. Is compensatory rest now required upon landing?

Response: You do not provide specific details on what is the termination time of the last flight segment. (I assume that by "termination at destination" you mean the "termination of the last flight segment.") However, you state, above, that the flight crew would only receive an 8 hours and 45 minutes look-back rest period. I therefore assume that the termination of that last flight segment, based on the other factual details you provide above, was at 2115. Looking back 24 hours from 2115 on Day 1 to 2115 on the day prior to Day 1, one finds only 8 and three quarters consecutive hours of rest

in the period 2115 (of the day prior to Day 1) to 0600 hours (on Day 1).

The only situation in which a certificate holder may reduce the minimum 9 hour required rest period is to utilize the "reduced/compensatory rest" exception that allows certificate holders the flexibility to adjust scheduled rests in the event of late arrivals. Thus, a certificate holder may reduce the required scheduled rest so that one finds a minimum look-back rest of 8 consecutive hours on termination of the last flight segment, as well as provide the required compensatory rest. In your scenario, the certificate holder could reduce the required minimum 9 consecutive hours of scheduled rest to 8 and three-quarters hours.¹ However, the certificate holder must also provide the flight crewmember with a compensatory rest period of at least 10 hours that must begin no later than 24 hours after commencement of the reduced rest period. In your scenario, that compensatory rest must begin at 2115 on Day 1, since the reduced rest begins at 2115 on the day before Day 1.

2. In the case of a ground delay prior to take-off, would the crew and certificate holder be correct in using planned flight time and taxi-in time in determining the scheduled arrival time?

Response: The FAA requires the crew and the certificate holder to use the actual expected flight time and taxi-in time, based on the specific conditions that exist on the day, to determine the scheduled arrival time for purposes of determining whether a flight should be commenced. For example, if an airline has published a flight time of three hours, but knows that the actual time the flight will take is four hours because of weather, ground delays, etc., then the FAA requires the carrier to use four hours for purposes of calculating the arrival time. On the other hand, if the air carrier has scheduled a flight for three hours, but on the day in question, it is reasonable to conclude that flight time would only be two and a half

¹ I note that the certificate holder could reduce the scheduled rest to a minimum of 8 hours.

hours, the carrier may use two and a half hours to calculate the arrival time.

3. If the ground delay continues to the point that the look-back rest is reduced below 8 hours, can the crew continue? If so, what are the rest requirements upon arrival?

Response: The flight may not take off if the look-back rest period is reduced to less than 8 hours. There must be at least an eight-hour look-back rest period. The eight-hour minimum reduced rest may not be further reduced under any circumstance.

4. If a ground delay, that would result in a late arrival that would not provide at least 8 hours of look-back rest is known by the certificate holder and/or crew prior to gate departure, can the crew depart legally based upon the published scheduled flight time?

Response: No. As stated above, the FAA requires the crew and the certificate holder to use the actual expected flight time and taxi-in time, based on the specific conditions that exist on the day, to determine the scheduled arrival time for purposes of determining whether a flight should be commenced. If the actual expected flight time is longer than the carrier originally calculated in determining the scheduled arrival time, then the actual expected flight time must be used in determining the look-back rest period.

Situation 2. On Day 1, the crew is late inbound on the second segment which results in not being able to leave the gate on the third and last segment on time. As a result, the look-back would now provide 8 hours and 45 minutes rest in the previous 24, based on the scheduled duration of the final segment.

1. Is compensatory rest now required upon arrival?

Response: Yes. Compensatory rest would be required upon arrival at the third destination. See the discussion in my response to question 1 of Situation 1 above.

2. If the crew were further delayed so that they could not depart to provide at least 8 hours of look-back rest upon arrival, could they depart legally?

Response: No. If, when using the actual expected flight time, the carrier cannot find at least 8 hours of look-back rest upon arrival, then the flight may not depart, under the FAA regulations. See my response to question 3 of Situation 1 above.

3. If there is a known ground stop for the destination of the final segment, which would result in look-back rest of only 7 hours and 45 minutes, can the crew legally leave the gate? If they are off the gate when the ground stop occurs, can they continue?

Response: If it is known, or reasonably should be known, that the flight time will be extended because of ground stops at the destination airport, then this information must be included in determining the actual expected flight time. If, when this information is factored in, it is known or should be known that arrival based upon the actual expected flight time will not result in at least 8 hours of look-back rest, then the flight may not leave the gate. If the flight is away from the gate, but is not yet in the air, then the flight may not take off. If the ground stops at the destination airport do not become known until after the flight is in the air, the FAA will not, as a matter of enforcement policy, take enforcement action against the flight crewmember or the certificate holder for a violation of the regulations, provided the ground stops at the destination airport are an unforeseen delay beyond the control of the certificate holder and the full, required minimum reduced rest and the compensatory rest are given at the completion of the flight segment.

4. Should the scheduled arrival time in 3 above be based upon published scheduled flight time or flight planned duration (flight time plus taxi time)?

Response: Arrival time in 3 above should be based on flight planned duration, i.e., the actual expected flight time based on the conditions existing on the day in question. Also, I am not sure what you mean by "published scheduled flight time." If you mean scheduled flight time as published in the Official Airline Guide (OAG), such flight time may be unrealistically high. Sometimes a certificate holder might overestimate the duration of a flight in order to have some

cushion in the schedule and be able to report an on-time arrival. The actual realistic flight time (block to block time) may be less than such "published scheduled flight time" in the OAG.

5. Would the reason for the crew being late on the second flight (beyond the control of the air carrier or not) have any bearing on the rest requirement?

Response: I assume that your question is whether section 121.471(g) (the "circumstances beyond the control of the certificate holder" exception) excuses a rest violation. No. That exception applies only to the scheduling of flight time. It is inapplicable to, and does not excuse, a violation of a rest requirement. Also see my response to question 1 of Situation 1 in which I discuss the use of the "reduced/compensatory rest" exception, its purpose, and compliance with its terms.

Situation 3: On Day 1, one of the carrier's hubs is impacted by a weather system in the morning. As a result, the carrier decides to delay all remaining departure times that day out of the hub.

1. If a departure so delayed would result in a crew having look-back rest of less than 9 hours, would compensatory rest be required?

Response: Yes. (I assume that the look-back rest, which is less than 9 hours, would still be at least 8 hours.)

2. If the delay resulted in a crew having look-back rest of less than 8 hours, could a crew legally depart?

Response: No. The FAA would consider this flight to be in violation of the regulations.

Situation 4. The crew and air carrier know, prior to departure, that forecast winds or enroute weather are resulting in a flight plan for that segment that exceeds the normal duration published in the carrier's schedules.

1. Can the crew legally depart if the scheduled arrival time based on the flight plan would encroach upon or delay the required start of a compensatory rest period?

Response: I assume that the questions for Situation 4 relate to Day 1 and to the last flight segment. I am not sure what you mean by "published in the carrier's schedules."

See my response to question 4 in Situation 3 above. If you mean that the crew and certificate holder know, prior to take-off, that en route weather conditions will result in the flight taking longer than expected, then my answer is as follows. Even if the expected termination of the last flight segment would allow a minimum 8 consecutive hours look-back rest period, if the crew and certificate holder expect, prior to take-off, that the flight will infringe on the required start of the compensatory rest period, the crew may not legally depart. Thus, although the actual flight time might exceed flight time limits and although exceeding flight time limits in these circumstances would be allowed under the "circumstances beyond the control of the certificate holder" exception, that exception does not permit an encroachment on reduced rest or compensatory rest below the minimums specified in the regulations.

2. If the original crewmember's schedule did not require compensatory rest, would compensatory rest be required if the scheduled arrival based upon the flight plan information resulted in the crewmember having less than 9 hours of look-back rest upon arrival?

Response: If, upon termination of the last segment, the look-back rest was actually less than 9 hours, then compensatory rest is required regardless of the scheduled arrival.

3. If the original crewmember's schedule did not require compensatory rest, would the crewmember be legal to depart if the scheduled arrival based upon the flight plan information resulted in the crewmember having less than 8 hours of look-back rest upon arrival?

Response: No. If, at the time of departure, it is calculated that a pilot will have less than 8 hours of look-back rest upon termination of the last flight segment, then the flight may not take off. The intention to give compensatory rest may not be used to permit a pilot to take a flight when it is known at the beginning of the flight that the pilot will have less than 8 hours of look-back rest upon termination of the last flight segment.

[FR Doc. 01-12419 Filed 5-14-01; 2:00 pm]

BILLING CODE 4910-13-M